

## Publication Home

Welcome to the 2017-18 Undergraduate Catalog. To navigate through the catalog, please use the navigation bar to the right and the icons at the bottom of this page. If the catalog is new to you, click on the "Catalog User Guide" for additional instructions about how to use the new features of the catalog and how to print out particular pages. If you are a faculty member, the "Faculty FAQ" will take you to regularly used faculty resources. All of these changes are designed to provide clear, accurate and easily accessible information for students, faculty, and the larger university community.

### Mission:

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. (more)

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## Official Catalog

The online catalog is the official document relative to academic program offerings and charges. Any print-outs of pages taken from the on-line version are, by definition, unofficial.

## Introduction to the University

Point Loma Nazarene University (PLNU) is a liberal arts institution affiliated with the Church of the Nazarene. Accredited by the WSCUS Senior College and University Commission, Point Loma offers degree programs at the baccalaureate and graduate levels. The university's main campus is located on the Point Loma peninsula between the San Diego Bay and the shores of the Pacific Ocean with additional campus sites in San Diego, Mission Valley, and Bakersfield and currently enrolls nearly 4,200 students.

## Church and University

Point Loma Nazarene University maintains its regional and international affiliation with the Church of the Nazarene through its theological and mission commitments. It is owned and governed by its Board of Trustees who oversee the affairs of the university as a self-selecting and self-perpetuating body.

The Church of the Nazarene is an international protestant denomination in the Wesleyan-holiness tradition with an evangelical Christian mission emphasizing salvation and holy living. The relationship of the university with the denomination is characterized by a mutual commitment to the doctrine and mission of the church and to its ministry and service in a global context.

## Heritage

In 1895, Phineas F. Bresee, a minister in the Methodist Episcopal Church, and J. P. Widney, a Methodist layperson and former president of the University of Southern California, founded the Church of the Nazarene in Los Angeles, California. Their primary purpose was to bring the good news of the Gospel of Jesus Christ to the poor and

underprivileged. In 1902, Dr. Bresee founded Pacific Bible College, at the urging of several laypersons. Its purpose was to train ministerial and lay leaders for the new denomination.

Through the generosity of Mr. and Mrs. Jackson Deets, Pacific Bible College was able to purchase the Hugus Ranch in northeast Pasadena. With the subsequent move to the new Pasadena campus in 1910, the institution became Nazarene University and enlarged the scope of the curriculum to include a typical program in the liberal arts. In 1924, it was reorganized as Pasadena College (PC), the undergraduate honor society known as Sigma Phi Mu was organized, and a system of student government was instituted.

Pasadena College received initial accreditation from the Northwest Association of Secondary and Higher Schools in 1943, and from the Western College Association in 1949. In 1951, PC received state accreditation of its education program, and the Board of Trustees approved the addition of graduate education in 1965. Faced with a growing enrollment and the need for expansion, the college moved to San Diego's historic Point Loma peninsula in the summer of 1973. Today, as Point Loma Nazarene University, the institution offers numerous majors in various academic degrees, is approaching an enrollment of 4,200 at all of its teaching locations with a faculty and staff of 662, and enjoys an ocean-front campus in San Diego and strategically located regional centers throughout southern California.

## The University Community

**The Students.** The university welcomes qualified students who desire higher education in a context of vital Christianity. The role of Point Loma in higher education is fulfilled by helping students realize their mental, physical, social, moral, and spiritual ideals. The university's belief is that a personal commitment to Jesus Christ is the basis for achieving self-worth and understanding, the motivation for building a just social order, and the means for relating to God through worship and service.

**The Faculty.** The Point Loma faculty is composed of Christian teachers/scholars who are dedicated to teaching and other scholarly activity in an environment "where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith." Individuals serving as faculty are committed to lifelong learning and teaching. They strive to exemplify excellence in their profession and model a personal understanding of the interconnectedness of faith, learning, and living.

**The Staff.** The university community also includes qualified persons who provide vital support services to academic and co-curricular enterprises. Often directly involved in the lives of students and faculty, dedicated staff work diligently to provide services that make a quality difference at Point Loma.

**The Alumni.** Graduates and former students of Point Loma Nazarene University are an equally important -though extended-part of the university community. They embody the mission and goals of the university and seek to make a difference all over the world. Alumni participate in the life of Point Loma as well through giving opportunities and frequent memorable events on campus.

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## **University Mission**

## **Vision Statement**

Point Loma Nazarene University will be a nationally prominent Christian university and a leading Wesleyan voice in higher education and the church - known for excellence in academic preparation, wholeness in personal development, and faithfulness to mission.

## **Mission Statement**

### **To Teach ~ To Shape ~ To Send**

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

## **Mission Context**

The university, established in 1902 by the Church of the Nazarene, offers quality liberal arts and professional programs on its campus in San Diego and select graduate and professional programs throughout the denomination's Southwest Educational Region.

## **Core Values**

- **Excellence in teaching and learning** - Teaching and learning constitute the central and defining activities of Point Loma Nazarene University. Faculty believe that effective teaching includes maintaining a vital relationship with one's discipline, establishing a positive connection to students, and building bridges among the students as a community of learning with the academic material.
- **An intentionally Christian community** - PLNU wants students to be participants in a community of learning who intentionally think and behave as Christians in all of their endeavors. Through many curricular and co-curricular activities, PLNU builds a community where women and men are challenged to explore ways to align their hearts and minds to that of Christ.
- **Faithfulness to our Nazarene heritage and a Wesleyan theological tradition** - While working cooperatively with the whole church of Jesus Christ, the university is committed to maintaining and celebrating our denominational ties with the Church of the Nazarene and embracing the distinctives of that tradition.
- **The development of students as whole persons** - A complete education prepares women and men to live full lives that integrate the pursuit of knowledge with beliefs, values, and actions. Holistic learning prepares students to make a positive difference in the world.
- **A global perspective and experience** - PLNU students should be equipped to become "world citizens." The university provides academic coursework, international study, field research, and ministry experiences that aid students in becoming conversant with the complexities of life in the global community.
- **Ethnic and cultural diversity** - PLNU recruits women and men from a variety of cultural, ethnic, and socio-economic backgrounds as students, faculty, and staff. A willingness to hear and learn from many diverse voices is foundational to a Christian liberal arts education and prepares students to become truly educated people, equipped to live in a diverse society and world. The university therefore actively pursues ideas, practices, and relationships that honor diversity and encourages engagement with others different from one's self in order to grow in community with and be reconciled to one another.
- **The stewardship of resources** - PLNU considers itself to be caretaker of all that has been entrusted to the university (people, facilities, money, and knowledge), using resources in a way that reflects the purposes of God and protects the goodness of God's creation.
- **Service as an expression of faith** - The university community understands itself to be stewards, not owners, of time, talent, and selves. Part of the call to Christians is to serve the world, working to better the condition of humankind both locally and globally.

## Institutional Learning Outcomes (ILO)

Institutional Learning Outcomes (ILO's) at Point Loma Nazarene University are the broad, over-arching outcomes aligned with university mission and core values that inform program outcomes in the university's academic, co-curricular, and support units. These ILO's capture the breadth of the PLNU experience and community and help define its uniqueness. For students beginning their educational experience, the ILO's determine those focal points that mark their journey, and for graduate and adult students continuing their academic careers, the ILO's define both the starting point and the direction of their ongoing journey. For the PLNU staff and faculty, the outcomes explicitly articulate the institution's expectations. They guide the community in discussions around questions of faith, profession, social justice, personal relationships, service, giftedness, political and community engagement, and life choices.

The university and the student work cooperatively to achieve ILO's, so that students will be prepared to live faithfully as engaged, growing Christians who seek to model the character of God in their lives. These students will also possess curiosity for life-long learning; the ability to think critically about global challenges; the ability to identify, create and weigh alternative viewpoints and opinions; and the ability to imagine and enact characteristically Christian ways of addressing these challenges. To assist students in achieving these ILO's, the university offers students a safe environment to challenge the status quo, to engage intentionally in discussions that test the foundation of their views, to build a respect for the stewardship of creation, to show compassion toward those in need, and to respect the diversity of opinions within and outside the Christian faith community.

"As a community of faithful learners, Point Loma Nazarene University's purpose for learning is to engender greater and deeper love for God and all that God has created, exploring the world in the confidence of God's grace. As a university seeking faithfulness to the Wesleyan tradition, we do not see learning and faith as two separate and distinct spheres that need to be forced together. Rather, we engage in the learning process as a people striving to live faithfully toward Jesus Christ, who calls us to this love of God and neighbor. We pursue such faithful learning, living and loving in the community. We pursue the vocation of learning together in the very presence of the God of the universe, freeing us to ask hard questions about our beliefs, ourselves and our world." (*A Wesleyan Approach to Faithful Academic Life*, PLNU, from 2009 edition).

As a learner-centered expression of our mission statement, the ILO's describe how members of the Point Loma Nazarene University community will demonstrate learning, growing and serving.

### **Context #1: Learning, Informed by our Faith in Christ**

ILO #1: Students will acquire knowledge of human cultures and the physical and natural world while developing skills and habits that foster life-long learning.

### **Context #2: Growing, in a Christ-Centered Faith Community**

ILO #2: Students will develop a deeper and more informed understanding of self and others as they negotiate complex environments.

### **Context #3: Serving, in a Context of Christian Faith**

ILO #3: Students will serve locally and/or globally in vocational and social settings.

## **The University Seal**

The university seal is used on all official documents. It consists of a shield picturing the symbols of VENIA (Grace), VERITAS (Truth) and SANCTITAS (Holiness), themes that-in keeping with the heritage of Point Loma Nazarene University-have been identified with the Wesleyan-holiness tradition.

## **Point Loma Campus and Facilities**

### **Advantages of Location**

Point Loma Nazarene University enjoys many advantages from its location in beautiful, culturally rich Southern California. San Diego itself is an area of unequalled climate and spectacular scenery. Neighboring institutions affording advantages in library, culture, and nature study resources include the University of California-San Diego, San Diego State University, San Diego Symphony Orchestra, San Diego Opera Company, Scripps Institute of Oceanography, Palomar Observatory, and many others.

The university enjoys a quiet, natural setting overlooking the Pacific Ocean only ten minutes from the center of metropolitan San Diego. With Los Angeles two and one-half hours driving time to the north, Mexico 30 minutes to the south, the ocean immediately to the west, and San Diego Bay and the Laguna Mountains to the east, the Point Loma peninsula is a most desirable location.

The economy of the greater San Diego area is also advantageous in affording opportunities for part-time employment for students who desire work to help support themselves.

## **The Point**

The campus, located on San Diego's picturesque Point Loma peninsula, is a 93-acre plot first established as an educational site by the Theosophical Society of America and has been occupied since by Balboa University, California Western College, and United States International University. The early occupants of this site erected a number of wooden buildings, some of which have been renovated and are still in use as designated historical sites. Since 1953, numerous additional buildings have been constructed, and today the campus includes art studio facilities, a theatre, physical education complex, the Fermanian School of Business and Business Center, the Cooper Music Center with its 400-seat Crill Performance Hall, Colt Hall, Nicholson Commons, Draper Hall, Smee Hall - School of Theology and Christian Ministry, and the Bond Academic Center. Buildings of historical interest include the Greek Amphitheatre, first of its type to be built in the United States; Mieras Hall, built in 1901 by the Spalding family; and Cabrillo Hall, originally the home of Madame Katherine Tingley, leader of the Theosophical Society.

## Special Collections

The San Diego campus of Point Loma Nazarene University is not only a garden spot overlooking the San Diego Bay to the east and the Pacific Ocean to the west. It also is home to several collections and works of public art.

Paintings from the Spiros John Karras Collection of California Plein Air paintings, housed primarily in Cooper Music Center, are prominently displayed for public viewing. The Fischer Collection (a rare and unique set of matched, hand-made string instruments for use by faculty and student string quartets) is housed in Cooper Music Center and may be viewed and heard in public recitals.

Ryan Library has two collections of note: special collections of the writings of Arminius and John Wesley and the William C. and Frances Vaughters collection of pre-Columbian artifacts. In addition to these collections, the campus is home to various works of art. As a former center for the Theosophical Society, original buildings feature interior woodworking by Reginald Machel. Ryan Library houses sculptures of the artist Scott Stearman and an original Norman Rockwell painting created for use as a Saturday Evening Post cover.

Two monumental works of sculpture grace the campus in Point Loma: *The Calling*, by Scott Stearman, and *Centenary Passage*, by Peter Mitten. The first was presented to the university by the Women's Auxiliary to portray Jesus' calling of the disciple Peter as a symbol of the "divine calling to all, the assurance of Christ's constant companionship, and the invitation to become fishers of men." The second is a 10-foot work of granite and bronze created by local artist and former Point Loma Nazarene University faculty member in the Department of Art and Design. It was commissioned to commemorate the university's centennial during the 2001-2002 academic year.

## Ryan Library

Ryan Library supports student learning in an environment that combines the traditional values of the liberal arts university with the technological advances of the 21st century. Library faculty and staff are dedicated to serving the information needs of students, faculty, and all others affiliated with the university. The library is home to a variety of comfortable learning spaces: rooms for group work and projects, clusters of soft seating, areas for quiet study, and more. In addition, Ryan Library is home to over 170,000 volumes, including books, periodicals, and several specialized collections. The library also subscribes to numerous online databases, many of which provide full-text access. For items not held by the library, InterLibrary Loan services provide access to resources located throughout the region and the world. Online access to library resources and services is available through the Ryan Library webpage at [www.pointloma.edu/library](http://www.pointloma.edu/library). In classroom settings and one-on-one consultations, librarians teach students how to find appropriate resources, create effective search strategies, and evaluate online information. The work of the library faculty and staff fosters the pursuit of knowledge, excellence in teaching and learning, and respect for inquiry and diverse points of view.

## Information Technology Resources

## **Academic Computer Center (Ryan Learning Center) Computer Labs**

At the Point Loma campus, undergraduate students find a robust network with more than 350 computers in the Ryan Learning Center computer labs and in a number of school and department computer labs. These computers provide students, faculty, and staff with resources for education, research, and communication. The labs make available over 100 applications ranging from word processing to sophisticated statistical, art, programming, and discipline-specific applications.

### **Software**

Students may purchase the Microsoft Office suite at a discounted rate through [journeyed.com](http://journeyed.com). Students are also provided anti-virus software at greatly reduced pricing. Discounts on additional software, as well as both Apple and Microsoft hardware are also available through PLNU.

### **Internet Services (E-mail and Web)**

Students can conduct research and communication using the campus wireless network as well as the computer labs, library, and residence hall rooms. Each student is given a network account, an e-mail account (which may be used after graduation), and a network area for storing files, presentations, assignments, attachments, etc. In addition to telephone and written correspondence, email is a recognized means of official university-to-student communication. Students are expected to read their university e-mail on a regular basis. When away from the university, students can access their email account via the web. Students are also able to go online to register for classes, check grades, and view their class schedule and other student information in their portal. The Point Loma Nazarene University Web Portal can be accessed at <http://my.pointloma.edu>.

Undergraduate students have access to a variety of technology resources - at the regional centers, as well as from their homes and offices. Wireless Internet access is available at each regional center allowing access to the internet as well as the following PLNU resources:

- Point Loma Portal - <http://my.pointloma.edu>
- Email - <http://gmail.pointloma.edu>
- Learning management system - <http://canvas.pointloma.edu>
- Library research materials - [www.pointloma.edu/library](http://www.pointloma.edu/library)

### **Residential Computing**

PLNU has extensive wireless coverage across our campuses including the residence halls. While there is limited access to the wired network, wireless is the preferred connection type. There is twenty-four-hours-a-day, seven-days-a-week access to the network from the convenience of the students' rooms for email, research, web browsing, etc. It is highly recommended that students bring a computer, preferably a notebook or tablet, to campus. Notebook (laptop) or tablets offer the most flexibility to students as they can be connected around campus and used in class if allowed by the professor. During New Student Orientation (NSO), students receive information and assistance connecting to the PLNU network as well as their accounts.

### **Help Center**

The Help Center is available to answer calls and emails from students who have technology questions. Students may also visit the Help Center, located on the third floor of Ryan Learning Center. Technicians will troubleshoot connectivity and account access issues. Assistance for PLNU-related technology is available for all undergraduate and graduate students by phone and email:

- 619-849-2222
- Help@pointloma.edu

## **Media Services**

Media Services, under the supervision of Information Technology Services, supports the use of non-print learning resources. These resources, located in the Media Services area, range from computerized presentation systems to video in several formats, audio in most forms, and various types of film. Audio and video production, preview rooms, a self-service materials preparation area, and a Mac computer lab is also available for student use.

## **Centers and Institutes**

The university sponsors several centers and institutes that are directly linked to the academic enterprise and extend the institutional mission in practical ways that assist both students and the broader community.

### **The Center for International Development**

The Center for International Development exists to apply life-affirming business principles to the complex challenges of global poverty. The center places a particular focus on areas of economic and social development. The center is committed to equipping, training, and sending Christian leaders to serve international communities that are suffering and to support the work of the church. The center supports the vision of the university and the Fermanian School of Business by preparing students for professional service with international humanitarian and missions agencies. The center grew out of an exploratory visit to Armenia by PLNU faculty and George Fermanian to identify ways the university could proactively prepare students to address the humanitarian and economic challenges and opportunities of globalization.

### **The Center for Justice and Reconciliation**

As an organization of Point Loma Nazarene University, in the prophetic traditions of the Holy Scriptures highlighting God's special concern for the poor and the oppressed, and consistent with John Wesley's call to a holiness that is lived out in ministry among and to the poor, the Center for Justice and Reconciliation (CJR) exists to study poverty and oppression and teach Christian means of social engagement.

The CJR's popular speaker series, Brewed Awakening, brings engaged social change agents to speak about their work and their faith to campus; faculty and students often tie issues raised at the Brewed Awakenings to classroom reflection. The CJR runs a Justice and Reconciliation study abroad to South Africa. The CJR promotes involvement in off-campus activities and networking and hosts co-curricular inter-disciplinary forums and workshops for ongoing faculty, staff, and student enrichment on the themes of poverty, globalization, racism, gender discrimination, and cross-cultural awareness. The CJR also coordinates/sponsors research projects that address particular needs of the poor and oppressed in San Diego/Tijuana with a specific focus on the role that communities of faith have in addressing these needs. Student internships are available in subject areas such as human trafficking, homelessness, immigration, worker justice, and Christian peacemaking.

### **The Center for Pastoral Leadership**

The Center for Pastoral Leadership exists to enhance the educational mission of the university through its work with ministerial students, pastors, and the Church. The center is an educational and service resource designed to strengthen the relationship of the university and the sponsoring denomination, the Church of the Nazarene, and to promote effectiveness in pastoral ministry.

Activities of the center include mentoring of pre-ministerial students, continuing education for pastors, and other aspects of church/university relations including, especially, pastoral support.

## **The Center for Teaching and Learning**

Established in 2000, PLNU's Center for Teaching and Learning (CTL) exists to provide leadership, encouragement, advocacy, and resources to enhance teaching, learning, and scholarship for all faculty, including full-time, part-time, and adjunct faculty. The Center is committed to cultivating a culture at PLNU that values and facilitates ongoing professional development and growth. CTL supports faculty as they design coursework, improve classroom techniques, contemplate and adapt new techniques and technologies into their classrooms, and assess the effectiveness of their teaching methods.

The Center supports professors in a wide variety of ways as they further their scholarship and seek effective strategies to engage students in learning. CTL houses a substantial library, offering books on loan on a wide range of topics relevant to teaching, learning, scholarship, writing and research. CTL also runs workshops on pertinent topics, brings in outside experts to share new ideas and strategies and develops learning communities amongst faculty that can facilitate lasting change across our campus.

The CTL office and reading room is located in the Deans' Center on the west side of Bond Academic Center and is open during normal business hours as a resource for all faculty.

## **The Early Childhood Learning Center**

The Early Childhood Learning Center is designed as an interactive laboratory school. The mission of the Early Childhood Learning Center is to provide a high quality educational experience for university students from observations, demonstration teaching, and individualized experiences with young children. Although the Early Childhood Learning Center functions as a laboratory school in the Department of Family and Consumer Sciences, it is open to all academic disciplines of the university in a variety of ways. The center is an open environment where teachers, children, students, and parents interact, play, work, and learn together. The programs of the center are designed to teach the whole child socially, emotionally, cognitively, physically, creatively, spiritually, and to give guidance to the university student in modeling the practice of alternative philosophies of early childhood education.

## **The Fermanian Business and Economic Institute**

The Fermanian Business and Economic Institute is a strategic unit of PLNU that specializes in a variety of consulting services dedicated to discovering insights that effect change for businesses, and nonprofit organizations, and government entities around the globe through contracts, fee-for-services consulting, publications, events, and subscription for economic analyses. Our skilled team of consultants, economists, and researchers provide clients and partners with individualized, actionable results that support strategic decision-making. The FBEL holds membership in a variety of prominent business organizations including the San Diego Military Advisory Council, National Association for Business Economics, and others.

Our clients include California State Treasurer, San Diego Military Advisory Council (SDMAC), Building Industry Association (BIA) San Diego, Terrapin Bright Green, National Association for Business Economics (NABE), Chain Link Fence Manufacturers Institute (CLFMI), Sempra Generation, San Diego Zoo Global, and many other public and private firms and organizations.

## **The Health Promotion Center (School of Nursing)**

The School of Nursing's Health Promotion Center (HPC) provides needed health care services, referrals and advocacy for individuals and families in the San Diego community in order to promote optimal health. The program is located at

the Mid-City Church of the Nazarene. This free clinic is staffed by nursing faculty and students each week for those adults in the community with little or no access to health care. Using a service learner model, the HPC offers health assessments including screening labs. It also offers TB skin tests, Tdap immunizations, Flu shots, pregnancy testing, blood pressure and diabetes screening, individual health teaching, and health education classes.

## **The Margaret Stevenson Center for Women's Studies**

The Center for Women's Studies was created as a result of the university's historic affirmation of the value and dignity of women and features a minor in Women's Studies. The minor is a sequence of courses of interest to both women and men that examine important gender issues and offers the opportunity for dialogue about a transformational Christian praxis in these areas. In addition to the academic minor, the center regularly sponsors speakers from on and off the campus and offers students and faculty a library of resources on gender issues and Christianity.

## **The Wesleyan Center**

The Wesleyan Center exists to inspire a new generation of Wesleyan thinking that will influence the broader church and social worlds of the 21st century. The center provides research opportunities for resident faculty and visiting scholars on vital contemporary issues. To further its mission, the center sponsors individual and collaborative scholarship, convenes conferences and symposia, and funds projects capable of producing Wesleyan perspectives bearing on faith, thought, and practice.

## **Accreditation, Affiliations and State Authorization**

Point Loma Nazarene University is numbered among those institutions of higher education that meet or exceed the rigorous standards of accrediting associations and commissions. Point Loma Nazarene University is accredited by the WASC Senior College and University Commission (WSCUC), for which it periodically completes a self-study that addresses recognized standards and principles of excellence.

**WSCUC may be contacted at 985 Atlantic Avenue, Suite 100, Alameda, CA 94501, or by telephone at (510) 748-9001.**

In addition, Point Loma Nazarene University has gained professional and program accreditation from the following agencies:

*Academy of Nutrition and Dietetics*  
*Accreditation Council for Business Schools and Programs\**  
*California Board of Registered Nursing*  
*California Commission on Teacher Credentialing*  
*Commission on Accreditation of Athletic Training Education*  
*Commission on Collegiate Nursing Education*  
*Council on Social Work Education*  
*National Association of Schools of Music*  
*National Council for Accreditation of Teacher Education*

\*Fermanian School of Business programs only.

Point Loma Nazarene University and individual faculty members hold membership in the following organizations:

*Academy of American Poets*  
*Academy of International Business*  
*Academy of Management*  
*Academy of Marketing Sciences*  
*Academy of Nutrition and Dietetics*

*Accord Network*  
*Accreditation Council for Business Schools and Programs*  
*African Studies Association*  
*Alpha Psi Omega, Theatre Honor Fraternity*  
*American Academy of Religion*  
*American Anthropological Association*  
*American Association for Higher Education*  
*American Association for the Advancement of Science*  
*American Association of Christian Counselors*  
*American Association of Colleges for Teacher Education*  
*American Association of Colleges of Nursing*  
*American Association of Critical Care Nurses*  
*American Association of Family and Consumer Sciences*  
*American Association of Health, Physical Education, Recreation and Dance*  
*American Association of Immunologists*  
*American Association of Presidents of Independent Colleges and Universities*  
*American Association of Teachers of Spanish and Portuguese*  
*American Chemical Society*  
*American Choral Directors Association*  
*American College Health Association*  
*American College of Healthcare Executives*  
*American College of Nurse-Midwives*  
*American College of Sports Medicine*  
*American College Personnel Association*  
*American Conference of Academic Deans*  
*American Council on Education*  
*American Counseling Association*  
*American Economic Association*  
*American Educational Research Association*  
*American Historical Association*  
*American Institute of Certified Public Accountants*  
*American Institute of Graphic Artists*  
*American Library Association*  
*American Marketing Association*  
*American Mathematical Society*  
*American Physical Society*  
*American Political Science Association*  
*American Psychiatric Nursing Association*  
*American Psychological Association*  
*American School Counselors' Association*  
*American Scientific Affiliation*  
*American Sociological Association*  
*American Studies Association*  
*Asian American Journalism Association*  
*Associated Writing Programs*  
*Association for Asian Studies*  
*Association for Christians in Student Development*  
*Association for Christians in the Mathematical Sciences*  
*Association for Institutional Research*  
*Association for Psychological Science*  
*Association for Supervision and Curriculum Development*  
*Association for Women in Mathematics*  
*Association for Women's Health, Obstetric, and Neonatal Nurses*  
*Association of American Colleges and Universities*

*Association of California Nurse Leaders*  
*Association of California School Administrators*  
*Association of Christian Economists*  
*Association of Christian Librarians*  
*Association of Christian Schools International*  
*Association of Christian Schools International Administrators*  
*Association of College and Research Libraries*  
*Association of Computing Machinery*  
*Association of Governing Boards of Universities and Colleges*  
*Association of Independent California Colleges and Universities*  
*Association of the United States Army*  
*British Society for the History of Mathematics*  
*Broadcast Education Association*  
*Bronte Society*  
*California Academic and Research Libraries*  
*California Association for Resource Specialists and Special Education Teachers*  
*California Association of Bilingual Educators*  
*California Association of Colleges for Teacher Education*  
*California Association of Colleges of Nursing*  
*California Association of Family and Consumer Sciences*  
*California Association of Health, Physical Education, Recreation and Dance*  
*California Association of Professors of Education Administration*  
*California Association of Teachers of English*  
*California Clinical Nurse Specialist Network*  
*California College Health Nurses Association*  
*California Council on Education of Teachers*  
*California Council on Teacher Education*  
*California Psychological Association*  
*California Society of Certified Public Accountants*  
*California Sociological Association*  
*Canadian Society for the History and Philosophy of Mathematics*  
*Catholic Biblical Association of America*  
*Charles Wesley Society*  
*Children's Literature Association*  
*Christian Association for Psychological Studies*  
*Christian Business Faculty Association*  
*Christian Holiness Partnership*  
*Christian Library Consortium*  
*Christians for Biblical Equality*  
*Christians in the Visual Arts*  
*College and University Personnel Association*  
*College Music Society*  
*Collegiate Media Advisors*  
*Committee on the Status of Women in the Economics Profession*  
*Conference on Christianity and Literature*  
*Conference on Faith and History*  
*Consortium for Computing Sciences in Colleges*  
*Council for Christian Colleges and Universities*  
*Council for Higher Education*  
*Council for the Advancement and Support of Education*  
*Council for Undergraduate Research*  
*Council of Administrators of Family and Consumer Sciences*  
*Council of Independent Colleges*  
*Credential Counselors and Analysts of California*

*Direct Marketing Association*  
*Evangelical and Ecumenical Women's Caucus*  
*Family and Consumer Sciences Education Association*  
*Golden State Athletic Conference*  
*Institute of Electrical and Electronics Engineers*  
*Institute of Management Accountants*  
*International Association for Jazz Education*  
*International Network for Social Network Analysis*  
*International Reading Association*  
*International Shakespeare Society*  
*International Writing Centers Association*  
*Investigative Reporters and Editors*  
*Learning Disabilities Association*  
*Marian Association of Helpers*  
*Mathematical Association of America*  
*Midwest Modern Languages Association*  
*Modern Language Association*  
*Music Educators National Conference*  
*Music Teachers National Association*  
*NAFSA: Association of International Educators*  
*National Association for Business Economics*  
*National Association for Education of Young Children*  
*National Association for Research in Science Teaching*  
*National Association of Biology Teachers*  
*National Association of Branch Campus Administrators*  
*National Association of Church Musicians*  
*National Association of Christians in Special Education*  
*National Association of Christian Social Workers*  
*National Association of Clinical Nurse Specialists*  
*National Association of Evangelicals*  
*National Association of Foreign Student Advisors*  
*National Association of Independent Colleges and Universities*  
*National Association of Intercollegiate Athletics*  
*National Association of Rehabilitation Nurses*  
*National Association of Schools of Music*  
*National Association of Social Workers*  
*National Association of Student Personnel Administrators*  
*National Athletic Trainer's Association*  
*National Career Development Association*  
*National Coalition Against Domestic Violence*  
*National Council of Teachers of English*  
*National Organization of Scholars*  
*National Parliamentary Debate*  
*National Register of Health Care Providers in Psychology*  
*National Science Teachers Association*  
*National Society of Hispanic MBA's*  
*National Strength and Conditioning Association*  
*National Women's Studies Association*  
*Nazarene Association of Colleges for Teacher Education*  
*North American Association of Christians in Social Work*  
*North American Christian Foreign Language Association*  
*Nurses Serves Organization*  
*Nursing Christian Fellowship (Intervarsity)*  
*Pacific Sociological Association*

*Pediatric Hematology Oncology Nurses*  
*Phi Beta Kappa*  
*Phi Delta Lambda, Alpha Chapter of the Nazarene Honor Society*  
*Phi Kappa Delta*  
*Phi Kappa Phi*  
*Phi Upsilon Omicron, National Honor Society of Family and Consumer Sciences*  
*Psi Chi, The International Honor Society in Psychology*  
*Religion News Writers Association*  
*Renaissance Society of America*  
*Rocky Mountain Psychological Association*  
*San Diego/Imperial County Libraries Disaster Response Network*  
*San Diego Press Club*  
*San Diego Sports Commission*  
*Shakespeare Society of America*  
*Sigma Theta Tau, International Honor Society for Nursing (Zeta Mu Chapter)*  
*Sigma Xi*  
*Société des Professeurs français et francophones d'Amerique*  
*Society for Applied Anthropology*  
*Society for Christian Ethics*  
*Society for Cinema and Media Studies*  
*Society for Human Resource Management*  
*Society for Industrial and Applied Mathematics*  
*Society for the Study of Early Modern Women*  
*Society for the Study of Psychology and Wesleyan Theology*  
*Society for the Study of Reproduction*  
*Society of Biblical Literature*  
*Society of Professional Journalists*  
*Southern California Instruction Librarians*  
*Statewide California Electronic Library Consortium*  
*TASH: Equity, Opportunity, and Inclusion for People with Disabilities*  
*The Association of Departments of English*  
*The Association of Independent Liberal Arts Colleges for Teacher Education*  
*The California Chicano News Media Association*  
*The College Board*  
*The Conference on Christianity and Literature*  
*The National Institute for Computer Assisted Reporting*  
*Victorian Interdisciplinary Studies Association of the Western United States*  
*Wesleyan Philosophical Society*  
*Wesleyan Theological Society*  
*Western Association of Graduate Schools*  
*Western Decision Sciences Institute*  
*Western Psychological Association*

## **State Authorization**

State authorization is a formal determination by a state that Point Loma Nazarene University (PLNU) is allowed to conduct certain activities. PLNU is not required to have state authorization in every state, and the University has opted at this time not to seek authorization in some states. Additionally, PLNU meets the criteria for an exemption from state authorization in certain states. A current list of authorizations and exemptions is available on the institutional website.

## **State and Federal Policies**

## **Notice of Non-Discrimination**

In accordance with Title VI of the Civil Rights Act of 1964, Point Loma Nazarene University does not discriminate on the basis of race, color, age, or national origin. Furthermore, as required by Title IX of the 1972 Education Amendments, Point Loma Nazarene University does not discriminate on the basis of gender in its educational programs, activities, or employment policies. Point Loma Nazarene University also provides equal opportunity for qualified persons with handicaps in compliance with the requirements of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The Director of the Academic Support Office provides advice and support to students with disabilities. Inquiries and appeals regarding compliance with these federal requirements may be directed to the Vice President for Student Development, Nicholson Commons, Office 303, (619) 849-2313.

## **Reservation of Rights**

Point Loma Nazarene University reserves the right to make changes in the academic catalogs regarding personnel listings, tuition and fees, majors and minors, course offerings, course sequencing, and other provisions and requirements relative to academic programs, within the student's term of attendance.

## **Education Records (FERPA) and Directory Information**

The Family Educational Rights and Privacy Act (FERPA) of 1974 as amended affords students certain rights with respect to their education records. These include: 1) the right to inspect and review the student's education records within 45 days of the day the university receives a request for access, 2) the right to request the amendment of the student's education records that the student believes are inaccurate or misleading, 3) the right to consent to disclosures of personally identifiable information contained in the student's education records, and 4) the right to file a complaint with the U.S. Department of Education concerning alleged failures by Point Loma to comply with the requirements of FERPA.

FERPA has specifically identified certain information called directory information that may be disclosed without student consent. Although directory information may be disclosed without student consent, PLNU is not required to release directory information.

The university has defined directory information as name, address (including electronic mail), telephone number, date and place of birth, major field of study, dates of attendance, enrollment status, degrees, honors and awards received, participation in officially recognized activities and sports, weight and height of members of athletic teams, degree candidacy, and the most recent previous educational agency or institution attended. This information may be provided, upon review by the Vice Provost for Academic Administration, as public information or to individuals who demonstrate a valid need to contact students.

Periodically, PLNU conducts formal and informal photo and video shoots (around the campus and at off-campus events and activities) for use in university publications, social media, promotional videos/commercials, and the PLNU Web site. Students who require that no identifiable image be used by the university must notify Marketing and Creative Services in writing prior to the second Monday of each semester. Students should email their request to [photo-optout@pointloma.edu](mailto:photo-optout@pointloma.edu) and include their full name and student ID number. In addition, PLNU may submit information about students' participation in school activities to media outlets. Students who require that their names be excluded from such stories must notify Marketing and Creative Services in writing prior to the second Monday of each semester.

The university may disclose education records to college officials with legitimate educational interests. A college official is a person employed by the university; a member of the Board of Trustees; or an individual serving on a committee, such as disciplinary or grievance committees. A college official has a legitimate educational interest if the information aids the official in fulfilling professional functions. PLNU also includes among college officials a student appointed to an official committee or assisting another official in performing tasks and outside service providers who perform an institutional service of function such as attorneys, auditors, and the National Student Clearinghouse. The

university may also disclose education records to post-secondary institutions in which a student is seeking or intending to enroll, or is already attending if the disclosure is for purposes related to the student's enrollment or transfer.

Questions relative to FERPA policies should be referred to the Office of the Vice Provost for Academic Administration or may be referenced at FERPA.

## **Student Consumer Complaint Process**

The U.S. Department of Education has amended the Higher Education Act (HEA) authorizing the "Program Integrity Rule." This amendment provides, among other things, regulations associated with the federal student financial aid program that require colleges or universities authorized to offer postsecondary education in one or more states to ensure access to a complaint process 34 CFR 668.43(b) that will permit student consumers to address the following:

1. Alleged violations of State consumer protection laws that include but are not limited to fraud and false advertising;
2. Alleged violations of State laws or rules relating to the licensure of postsecondary institutions; and
3. Complaints relating to the quality of education or other State or accreditation requirements.

To access a copy of PLNU's student complaint process, click [here](#).

An individual may contact the Department of Consumer Affairs of the Bureau for Private Postsecondary Education for review of a complaint. The Bureau may be contacted at 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA , 95833, at their website: <http://www.bppe.ca.gov/enforcement/complaint>, via email at [bppe@dca.ca.gov](mailto:bppe@dca.ca.gov), or by phone or fax at (916) 431-6959 PH, (916) 263-1897 FAX.

## **Religious Expression**

Founded in 1902, Point Loma Nazarene University (PLNU) is a Christian university committed to the liberal arts and professional preparation. A combination of challenging academics, deep spirituality, and service-centered action prepares students for living purpose-filled lives and integrating knowledge with beliefs, values, and actions.

Being of Wesleyan heritage, and affiliated with the Church of the Nazarene, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life. We also strive to provide a learning and living environment that promotes safety, transparency, personal integrity, civility, mutual respect, and freedom from unlawful discrimination.

This integration of faith and learning is recognized by the United States and California Constitutions and many state and federal laws. For example, exemptions in Title IX(1) and the California Equity in Higher Education Act(2) recognize the right of religious educational institutions such as PLNU to incorporate religious beliefs into all aspects of university life and maintain faith-based standards of behavior to which all community members voluntarily agree to follow. A full statement of PLNU's mission and community expectations for faculty, staff and students can be found at:

Student Standards of Conduct: Undergraduate Students

Residential Life Policy

Why PLNU

1. 20 U.S.C. Section 1681(a)(3).
2. Cal. Ed. Code Section 66271.

## **Admissions**

### **Admission Requirements and Procedures**

As a Christian institution providing higher education in the liberal arts and selected professional areas, Point Loma Nazarene University offers admission to qualified applicants of moral character, personal maturity, and intellectual ability. Preference is given to those who share the ideals and objectives of the university, and whose self-directive capabilities might enable them to profit in an optimal way from its total program of learning and developmental experiences. The Enrollment Management Committee of the faculty has ultimate responsibility for admission and readmission to the university. The university maintains a policy of non-discrimination in the admission of students.

All necessary forms in the process of application may be obtained from the Admissions Office. In preparation for initial entrance or readmission, applicants are encouraged to file the appropriate forms early in the process. Admission to the university does not in itself assure the student of housing, financial aid, or other necessary arrangements. It is the responsibility of the applicant to make such arrangements with the appropriate office. February 15 is the priority deadline for admission to the university for the fall semester.

### **Admission to Freshman Standing**

Students may apply as early as the fall semester of their senior year in high school or one year prior to transfer from another college or university. First-year applicants may apply for early action or regular admission. Early action is an option reserved for students who have made Point Loma Nazarene University one of their top-choice institutions providing notification by December 20. The deadline for early action is November 15 and requires receipt of all admission materials, including transcripts and test scores. Applicants for the February 15 regular admission priority deadline and those deferred from Early Action may receive notification between mid-March and the first week of April. Students seeking admission to the university following their secondary education must file the following with the Admissions Office:

- a formal application for admission;
- two recommendations;
- official SAT and/or ACT score reports;
- an official high school transcript or its equivalent; and
- a formal interview (strongly encouraged but not required).

The university expects applicants for admission to follow a typical preparatory course of study during their high school years. This should include the following program:

- English and literature - 4 years
- One foreign language - 2 years
- History and social sciences - 3 years
- Mathematics (through Algebra II) - 3 years
- Natural science (2 with laboratory) - 3 years

Note: Students who plan to major in mathematics or any of the sciences should include at least three years of mathematics and laboratory courses in physical or biological sciences in their high school programs.

Students who are admitted with any deficiencies in the above preparatory pattern may be required to make up such deficiencies either by taking certain courses or by demonstrating a minimum level of proficiency through acceptable scores on standardized achievement tests.

Freshmen entering Point Loma from accredited high schools have an aggregate GPA of above 3.7 and an average score of 1160 on the SAT examination (critical reading and math).

## **Admission of Transfer Students**

Students seeking admission from accredited colleges and universities must file the following with the Admissions Office:

- a formal application for admission;
- two recommendations;
- official SAT and/or ACT score reports and an official high school transcript (for students with less than 36 completed semester units at application);
- official transcripts of all college/university coursework; and
- a formal interview (recommended).

Students from accredited colleges and universities may be considered for admission provided a GPA of 2.000 has been maintained in all previous course work. Transfer applicants who have met all priority deadlines will receive notification between early February and mid-April. The university has developed articulation agreements with a number of community colleges. Transcripts submitted from non-accredited institutions are evaluated on an individual basis. Transcripts from universities outside the United States must be evaluated for the student by an independent evaluation service approved by Point Loma. Transfer students who do not have all official transcripts on file with the Admissions Office before initial registration may be admitted but will not be allowed to register for the following semester until all transcripts are on file. Issues related to proper placement are addressed below under "Advanced Placement."

Students from community colleges may transfer in a maximum of 70 applicable units toward the baccalaureate degree at Point Loma. All courses taken at a community college transfer as lower-division units only.

## **Admission of International Students**

Point Loma Nazarene University welcomes students from all over the world. Students for whom English is not the native language must demonstrate English language proficiency by taking the Test of English as a Foreign Language (TOEFL), available through the Educational Testing Service, Box 955, Princeton, New Jersey 08540. A score of 550 on the paper-based TOEFL is required, or 216 on the computer-based exam, or 80 for the TOEFL Internet Based Test (iBT). International students seeking admission to the university must file the following documents with the Admissions Office:

- a formal application for admission;
- two recommendation letters;
- official evaluated transcripts (high school or university) ;
- SAT/ACT scores if the student's native language is English or official TOEFL scores (for non-native speakers);
- an affidavit of support; and
- a formal interview (strongly recommended).

Students seeking to receive credit at the university from an institution outside the United States are required to have their foreign transcript evaluated by a service that is accredited by the National Association of Credential Evaluation Services (NACES). A detailed or course-by-course report is required. Official foreign transcripts are submitted to the service of choice and the evaluations subsequently submitted directly to the Office of Records. For further information, students may contact the Director of International Student Services/International Admissions Counselor.

## **Readmission to the University**

Students who leave the university must apply for readmission through the Office of Admissions, meeting calendar deadlines and making deposits as required. Students whose continuous enrollment is not interrupted by more than one semester may remain under their declared applicable Catalog. Those who are readmitted after two or more consecutive semesters of non-attendance return under the Catalog in effect at the time of readmission.

## **Special Features**

### **Entrance and Placement Examinations**

All applicants for admission to the university are required to take either the ACT Assessment of the American College Testing Program (ACT) or the Scholastic Assessment Tests (SAT) of the College Board. These tests are administered at high schools and university test centers throughout the United States. The scores earned are used for placement in certain courses. The Point Loma Nazarene University SAT testing code is 4605; the ACT code is 0370. Entering students who have not taken the entrance examination are required to meet this requirement after arrival.

### **New Student Orientation (NSO)**

An important component of the First-Year Experience at Point Loma Nazarene University is a program known as New Student Orientation (NSO). An intensive orientation to all aspects of student life at the university, NSO welcomes students and families to the main campus for a three-day series of events that focus on issues such as academic life, residential life, adjustment to the challenges of a university education, financing one's education, and enjoyable social events. The NSO experience is the culmination of mailings and website offerings prepared and administered by a cross-section of the university community, including staff, faculty, and student leaders. NSO is offered both in August and in January.

### **Course Challenge Programs**

Students may use a variety of vehicles for meeting graduation requirements other than in the traditional classroom. These include the Advanced Placement (AP) program sponsored by the College Entrance Examination Board, approved on-line courses, the College Level Examination Program (CLEP), and the International Baccalaureate (IB) program. (See also Transfer Credit.)

### **Advanced Placement Program (AP)**

Entering students who have satisfactory scores on AP examinations may receive credit in applicable areas of the curriculum. A score of four or five receives six units of credit where appropriate.

First-time freshman students who enter with advanced standing by a variety of means open to them are required, nevertheless, to fulfill the normal freshman experiences, even when the number of transcribed units exceeds the technical category of freshman. These include PSY 101, WRI 110 (or its equivalent), and BIB 101-BIB 102, unless met by substitutions approved by the Vice Provost for Academic Administration.

### **College Level Examination Program (CLEP)**

Students may earn up to 32 semester units of credit by demonstrating proficiency in Subject Examinations related to graduation requirements. Credit is awarded as recommended by the College Board, with some restrictions to certain majors and general education. Credits are awarded only after the student has earned twelve units in residence with a minimum GPA of 2.000.

## International Baccalaureate (IB)

Point Loma recognizes the International Baccalaureate (IB) program and awards advanced standing for Higher Level courses completed with a score of five or above. Official IB transcripts must be sent to the Office of Records for consideration. Credits awarded through the IB program are accepted as university credits and are not subject to the transcribing fee. For complete information, students should contact the Office of Records.

## Financing a PLNU Education

### Tuition and Fees

This Catalog section contains information on costs and how to take advantage of payment options and financial assistance through the Student Financial Services (SFS) Office. Students and parents are urged to read the following pages with care. Students are responsible for being aware of, and complying with, the information in this section.

### Tuition

TUITION BLOCK (12-17 semester units)	\$17,000/semester
Less than 12 units (per unit)	\$1,415
Units in excess of 17 units (per unit)	\$1,135
Nursing Program Fee (SO, JR, SR)	\$2,250/semester
2017 SUMMER SESSIONS TUITION (per unit)	\$425/unit + \$20 registration fee

### General Fees

<i>General fee (per semester)</i>	\$300
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This fee assists in covering the cost of student activities, Nicholson Commons operations, and university technology development. (Undergraduate students taking less than 12 units in a semester are charged \$25.00 per unit.)

<i>University Deposit (non-refundable after May 1st)</i>	\$425
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### Tuition Refund Insurance

PLNU offers Tuition Refund Insurance that reimburses families for tuition costs in the event that a student is unable to complete a semester due to accident or sickness. For more information regarding this plan, please go to [www.gradguard.com/pointloma](http://www.gradguard.com/pointloma). There is no provision for tuition refund insurance for students who enter during the

summer. The tuition refund insurance plan is available during the first week of fall and spring semesters. The fee for 2017-18 is \$123.75 per semester for \$12,500 coverage.

## **Audit Tuition**

Students auditing courses are not assessed additional tuition unless the student is registered for greater than 17 units or less than 12 units (including audit units). Students enrolled in greater than 17 units or less than 12 units will be assessed audit tuition equal to half of the regular tuition rate for those registered audit units.

## **Special Fees**

Undergraduate Application Fee	\$50
Laboratory and Course Fees	\$20 - 300
Writing Tutorial Lab Fee	\$150
Independent Study Fee (per unit)	\$250
Student Teaching Fee - GRAD (per unit)	\$75
Special Examination Fee	varies
Late Payment Fee: 5% of remaining balance, minimum fee	\$25
Graduation Fee	\$100
Student Athlete Fee	\$175/semester

## **Summer Graduation Fee (Refundable Prior to October 1)**

Application for Summer Graduation	\$500
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## **Music Fees**

Students enrolled in private music lessons are charged the following fees in addition to tuition charges. Students receive 14 lessons per semester.

### **Private Lessons**

One half-hour lesson per week (one unit)	\$440
One hour lesson per week (two units)	\$880

### **Practice Rooms**

Students enrolled in private or class lessons (vocal or instrumental) are charged for the use of a practice room in Cooper Music Center.

**Practice room per semester**

One half-hour a day	\$25
One hour a day	\$50

**Residence Fees**

Room and Board (per semester)

ROOM AND:	SHARED ROOM
Unlimited Access	
+ \$50 Dining Dollars	\$5,315
15 meals/week	
+ \$50 Dining Dollars	\$5,075
180 meals/semester + 10 Guest Meals	
+ \$200 Dining Dollars	\$5,075
120 meals/semester + 10 Guest Meals	
+ \$200 Dining Dollars	\$4,760

\* when available

Students desiring to live in residential housing pay a deposit in order to reserve a room, which is part of the \$425 University Deposit. The housing deposit may be refunded (after a 30-day waiting period) to students who withdraw after the eighth week of the semester, provided all accounts have been paid in full. There is also a \$12 charge per semester residence hall fund.

All unmarried students living in residential housing who are under 23 years of age are required to board at the Nicholson Commons Dining Room under one of the meal plans listed above. Students who do not formally choose a meal plan are charged for the 15 meals/week + \$50 Dining Dollars plan. Students are permitted to change meal plans during the first two weeks of the semester only. Freshman students are required to be on either the 15 meals/week plan or the Unlimited Access plan for their first year at PLNU. The Nicholson Dining Room is closed during the interim period between the fall and spring semesters and during Spring Break.

**Approximate Annual Costs (New and Readmitted Students)**

	SHARED ROOM	TWO SEMESTERS/1 Year
Tuition (12-17 units)	\$17,000	\$34,000
Room and Board †	\$5,075	\$10,150
General & Other Fees	\$312	\$624
Total Approximate Costs	\$22,387	\$44,774

† Shared room, 15 meals/week + \$50 Dining Dollars

Note: These figures do not include costs for books, supplies, health insurance, special fees, or personal expenses.

## Payment Information

Tuition, room, board, and fees are due and payable by the deadlines shown below. For the convenience of students and parents wishing to pay expenses in installments, a monthly payment plan is offered. (See option 2 below.)

A Statement of Account, which contains the class schedule as well as the semester charges and financial aid, is sent to all students prior to the payment deadline each semester. The Statement of Account also serves as the invoice from which payment should be made. In addition, an electronic billing statement showing all activity on the student's account will be available on-line on the student and parent portals throughout the academic year. Payment options and deadlines are:

### Option 1: Full payment of the Net Balance (total charges minus financial aid excluding Federal Work-Study awards) by the following dates:

Fall 2017 semester - August 1, 2017

Spring 2018 semester - January 5, 2018

Please Note: PLNU does not accept credit card payments toward tuition, fees and room/board. Payments can be made electronically through a valid checking or savings account.

### Option 2: The Net Balance in monthly payments

For one or both semesters using PLNU's Tuition Installment Plan (TIP) option. This interest-free alternative to lump-sum payments allows families to establish a budget for each semester and to make payments in monthly installments. Automatic payment from a valid checking or savings account is required. For more information contact the Student Financial Services Office at (619) 849-2538 or [sfs@pointloma.edu](mailto:sfs@pointloma.edu).

### Option 3: The Net Balance with a PLUS loan

The PLUS loan is a low-interest federal loan for parents. Parents who wish to apply do not have to demonstrate financial need but must meet certain credit criteria. PLUS loans are repayable over a ten-year period. To apply for a PLUS loan, parents should complete an on-line loan application at [www.studentloans.gov](http://www.studentloans.gov).

## Option 4: The Net Balance with a private loan

A private loan is based on the student's credit, and the interest rates vary. Student borrowers almost always require a credit-worthy cosigner. Students may apply for a private loan at [www.elmselect.com](http://www.elmselect.com).

## Option 5: Combination Plan

A combination of options 2 and 3 allows families to budget as much as possible from current income and savings, using the Tuition Installment Plan option, then borrow any remaining balance using the PLUS loan.

All charges must be paid each semester according to the established deadlines. Failure to make timely payment or to make other arrangements acceptable to the Student Financial Services Office will result in students being assessed a late fee (of 5% of the remaining student account balance) and may include de-enrollment. Students are not permitted to register for future semesters if they have a past-due balance.

## Refund Policies

### Tuition

Refunds are computed during regular semesters at the following percentages upon filing a properly executed change of schedule or withdrawal with the Office of Records.

#### *Semester-length courses (16 weeks)*

First Two Weeks of Semester	100%
Third Week	75%
Fourth Week	50%
Fifth through Eighth Week	25%

#### *Quad-length courses (8 weeks)*

First Week of Semester	100%
Second Week	50%
Third and Fourth Week	25%

Students are not entitled to any tuition refund after the end of the business day on Friday of the eighth week of a regular semester-long course (4 weeks for a quad course). Specific refund dates are published in Lomalink (the university's student newsletter). Students receiving federal financial aid who withdraw during the first ten weeks (60%) of the semester lose eligibility for all or part of their loans and grants, in accordance with federal regulations. For additional information, students should contact the Student Financial Services Office.

For refund and financial aid purposes, the last day of attendance will be defined for face to face classes as the last date of physical attendance in class and for online classes as the last day the student made an online contribution beyond logging in (responded to an online question, posted an assignment or otherwise actively participated).

## **Fees**

All Fees are fully refundable during the first four weeks of each regular semester (fall and spring) and during the first two weeks of each summer session and are not refundable after these dates.

### **Residence Hall Fees**

Refundable according to the tuition refund schedule except for the first two weeks of the semester (ending on the Sunday before the third week of classes) during which there is a charge of \$27 per night. The housing deposit may be refunded (after a 30-day waiting period) to students who withdraw after the eighth week of the semester, provided all accounts have been paid in full.

## **Meals**

Prorated as of the date the withdrawal is received in the Office of Records.

## **Miscellaneous Financial Regulations**

Students are responsible for handling all financial matters related to their attendance at the university. FERPA, the federal "Privacy Act," prohibits sending statements to parents or guardians of students 18 years of age or older without written permission of the student.

Students are charged for the full semester for all courses or private lessons for which they are registered, unless a "Change of Schedule" form is secured from the Office of Records, completed with proper signatures, and filed with the Office of Records. Any refunds or adjustments of student accounts arising from changes in class schedules are made as of the date on which the change of schedule form is filed at the Office of Records. Changes in arrangements for meals are made when requests or arrangements are completed at the Student Financial Services Office (this is true regardless of the date on which the student may have ceased attending classes or taking private lessons, or may have changed plans for meals).

At the time a student leaves the university, all accounts must be paid in full. The housing deposit and refunds, if any, will be applied to any charges due. Any unpaid balance will accrue interest at 10 percent per annum. In addition, Point Loma Nazarene University may report unpaid accounts to a national credit bureau. The student is responsible for paying all collection costs, including attorney fees and court costs as adjudged reasonable, in the event a suit must be instituted.

*Note: Transcripts and diplomas may not be released, nor will a student be permitted to participate in the annual commencement ceremony, until all accounts are paid.*

Operational costs are sometimes affected by factors over which the university has no control. Therefore, the charges and financial aid policies quoted in the Catalog are subject to change without notice.

## **Financial Aid**

### **Financial Aid at Point Loma**

The financial assistance program at Point Loma Nazarene University includes federal grants and loans, state grants, PLNU institutional aid, and external aid, including scholarships and grants awarded by corporations, civic organizations, and churches. Financial assistance is intended to recognize and assist students who otherwise would be unable to attend the university.

The university recognizes that the primary responsibility for paying expenses rests with the student (and spouse, if married) and parents who are expected to contribute in proportion to their resources. Any financial assistance awarded by the university is intended to help bridge the gap between the student's expected family contribution and the cost of attending PLNU.

Financial assistance is usually awarded to students based on need. The student's financial need and eligibility for various programs and the family's ability to pay are determined best by analyzing the information submitted on the Free Application for Federal Student Aid (FAFSA). Various federal and state regulations, institutional policies, and funding-level limitations may affect the types and amounts of financial assistance that a student may receive from year to year. Additionally, changes in information and circumstances may cause financial assistance awards to be reduced, increased, or eliminated subsequent to the initial determination of these awards.

**If the student's financial aid awards include need-based aid, then outside scholarships and all forms of PLNU institutional aid are treated as need-based also, and in certain cases may be reduced or canceled to prevent funding in excess of financial need.**

## Applying for Aid at PLNU

To receive any type of federal, state, or need-based institutional aid at PLNU, the student should complete the FAFSA (or renewal FAFSA) each academic year of enrollment prior to the March 2 priority deadline. Students who complete the FAFSA by March 2 will receive priority consideration for the full range of financial aid programs available at PLNU. Students who complete a FAFSA after the priority filing date are considered for institutional need-based awards only if there are remaining funds available. Students may submit a FAFSA throughout the academic year.

## Financial Need

Financial Need is defined as the difference between the student's Cost of Attendance (COA) for the academic year and the "Expected Family Contribution" (EFC) as determined by completion of the FAFSA.

Cost of Attendance is the sum of tuition, fees, room and board, books and supplies, transportation, and miscellaneous costs. Expected Family Contribution is a statistical figure calculated using the financial information provided on the FAFSA by the student and parent that represents the ability of the student's family to contribute to the cost of the student's education.

## Appeals for Special Circumstances

Federal regulations provide the SFS Office with discretionary authority to make case-by-case adjustments to student/parent FAFSA data in cases of special circumstances. Examples of special circumstances may include:

- Significant reductions to income (loss of job, reduction of work hours, etc.)
- Unusually high medical or dental expenses (uninsured amounts only)
- A parent attending college
- Dependency status appeals

If a student believes there are special circumstances that should be reviewed, the student should contact the SFS Office to see if an appeal is necessary. If after contacting the SFS Office and the appeal is feasible, the student must complete and submit a Request for Appeal Form for Special Circumstances or the appropriate form for the appeal (available at the SFS Office or online at [www.pointloma.edu/sfs](http://www.pointloma.edu/sfs)). After initial review of the appeal, additional documentation may be required.

## Federal Aid Programs (Requires completion of a 2017-18 FAFSA)

## **Pell Grant**

The Pell Grant is awarded to students with a qualifying Expected Family Contribution (EFC) as determined by the FAFSA. Pell Grant is gift aid and does not have to be repaid. It can be used to help pay university charges (tuition and fees, on-campus room and board) or living expenses. The maximum award for the 2017-2018 Academic Year (AY) is \$5,920.

## **Federal Supplemental Educational Opportunity Grant (SEOG)**

SEOG is a form of "campus-based" federal gift aid that is awarded to Pell Grant recipients who have a qualifying Expected Family Contribution (EFC). Since SEOG funding is extremely limited, not all students who qualify receive an award. The maximum SEOG Grant for the 2017-2018 Academic Year (AY) is \$1,500; however, final award decisions are subject to the final campus-based fund allocation awarded to PLNU. Students who have an EFC of less than or equal to 500 and are not full Cal Grant recipients will be considered as a priority group for funding.

## **Federal Work-Study**

The Federal Work-Study (FWS) program is awarded to eligible students but it is only guaranteed if the student acquires on-campus employment. Students eligible for Federal Work-Study awards are not guaranteed employment. If awarded Federal Work-Study, the student should contact the Student Employment Office to secure employment at (619) 849-2633 or online at [www.pointloma.edu/work](http://www.pointloma.edu/work). FWS is disbursed in the form of bi-weekly paychecks from the cashier's office in Draper Hall or by direct deposit.

## **Federal Loan Programs**

### **Federal Direct Student Loans**

The Federal Direct loan is a low-interest student loan borrowed directly from the U.S. government designed to help students pay for college. Depending on eligibility, the student may be awarded a subsidized (for a student who demonstrates "need" as determined by the FAFSA) and/or unsubsidized (no "need" required) Direct Loan. Subsidized means that the government will pay the interest accruing on the loan while the student is in school. Unsubsidized means that the student is responsible for paying all the interest that accrues on the loan amount from disbursement until the loan is repaid in full. Direct Loan interest rates and origination fees are published by the Department of Education and become effective on July 1st of each year. Understanding the importance of repaying any federal student loan taken while in school is critical. Sample loan repayment schedules are available for students at [www.studentloans.gov](http://www.studentloans.gov).

Yearly amounts:

Freshmen (0-24 units) \$5,500 (up to \$3,500 of which may be Subsidized)

Sophomore (25-56 units) \$6,500 (up to \$4,500 of which may be Subsidized)

Junior and Senior (57+ units) \$7,500 (up to \$5,500 of which may be Subsidized)

If the student is independent or the parent has been denied a Federal Parent PLUS Loan, the student may be eligible for an additional Unsubsidized loan (Freshman and Sophomore, \$4,000; Juniors and Seniors, \$5,000).

### *Federal Direct Subsidized and Unsubsidized Loan Repayment*

Repayment begins six months after the student graduates, withdraws, or drops below half-time status (i.e. less than six units).

Before Subsidized or Unsubsidized Direct Loan funds are released, online Entrance Counseling is required of all first time borrowers. This is a mandatory federal requirement to advise student borrowers of their rights and responsibilities in receiving a student loan. Loan amounts are generally released in two disbursements, regardless of enrollment period. Exceptions may be made for students enrolled in one semester. Students may accept all or a portion of their Federal Direct Loan eligibility. Loan origination fees will be charged in accordance with federal regulation from any federal student loan funds disbursed. The Entrance Counseling and completion of the Master Promissory Note (MPN) may be completed online at [www.studentloans.gov](http://www.studentloans.gov).

When a student graduates, withdraws from the university, takes an approved leave of absence, or drops below half-time status, Exit Counseling is required. This is a mandatory federal requirement for all students who have received a Direct Student Loan. Exit Counseling may be completed online at [www.studentloans.gov](http://www.studentloans.gov). PLNU offers optional in-person loan Exit Counseling to graduating seniors. Additional information may be obtained from the Student Financial Services Office.

#### *Direct Parent Loan for Undergraduate Students (PLUS)*

The Direct Parent PLUS Loan is a credit-based loan available to parents of dependent undergraduate students who file a 2017-2018 FAFSA. The PLUS Loan annual borrowing limit is equal to the student's cost of education minus any other financial aid awarded. Direct Parent PLUS Loan interest rates and origination fees are published by the Department of Education and become effective on July 1st of each year. Repayment begins 60 days after the loan is fully disbursed or borrowers may request a deferment or forbearance of repayment until their student leaves the university. The application and Master Promissory Note must be completed online at [www.studentloans.gov](http://www.studentloans.gov).

Normally, PLUS Loan funds are released in two equal disbursements: one for fall semester and one for spring semester. If the parent wishes to have the entire loan disbursed in a single semester, the parent must specify this on the online PLUS loan application. Loan origination fees will be charged in accordance with federal regulation from any Federal Parent PLUS Loan funds disbursed to the student account.

#### *Perkins Loan*

The Federal Perkins Loan is a low-interest federal loan for students who have demonstrated exceptional financial need. The interest rate is fixed at 5.00% for the life of the loan, and interest begins accruing nine months after graduation, withdrawal, or dropping to less than half-time status (i.e. less than six units). Repayment also begins at that time. Students have up to ten years to repay the loan. Students awarded a Perkins Loan must sign a Master Promissory Note (MPN) and complete Entrance Counseling before funds can be credited to their student account. Because of limited funding, there is no guarantee that a student will continue to receive Perkins Loan funding in subsequent years. Students must complete a 2017-2018 FAFSA to determine eligibility. When a student graduates, withdraws from the university, takes an approved leave of absence, or drops below half-time status, Perkins Loan Exit Counseling is required.

Note: Changes in federal regulations have resulted in the elimination of the Perkins loan program. Perkins loans may no longer be awarded or disbursed after September 2017.

#### *Nursing Student Loan*

The Nursing Loan is a low-interest federal loan for students enrolled in the PLNU Nursing program who demonstrate exceptional financial need. The interest rate is fixed at 5.00% for the life of the loan and begins accruing nine months after graduation, withdrawal, or dropping to less than half-time status (i.e., less than six units). Repayment also begins at that time. Students have up to ten years to repay the loan. Students awarded a Nursing Loan must complete Entrance Counseling and sign a Promissory Note each year before funds can be credited to their student account. Because of limited funding, there is no guarantee that a student will continue to receive Nursing Loan funding in subsequent years. Pre-Nursing program students are not eligible for a Federal Nursing student loan. Students must complete a 2017-2018 FAFSA to determine eligibility.

## Need-Based State Aid Programs

For details about any California state fund programs, students may visit the California Student Aid Commission (CSAC) website at [www.csac.ca.gov](http://www.csac.ca.gov).

### *Cal Grant*

Cal Grant is a program of the California Student Aid Commission (CSAC). Students may receive a Cal Grant for a maximum of four academic years (eight semesters) of undergraduate study. In addition, teacher credential students who received Cal Grant as undergraduates may be eligible for a two-semester extension of their benefits. Award amounts are determined annually by the passing of a final State of California budget; all Cal Grant awards listed on an award letter are to be considered "estimated" until the final budget is passed into law by the California legislature.

CSAC notifies new Cal Grant recipients whether they have been awarded an Entitlement or Competitive Cal Grant. Before a Cal Grant award can be added to a student's Financial Aid Award Letter, the SFS Office must review the data provided by the student and parents on the FAFSA to make sure that the student is financially eligible.

**Cal Grant A** is for students from low to middle income families. It is restricted to paying tuition and mandatory fee charges only. The award amount of the Cal Grant is determined upon approval of a final State of California budget.

**Cal Grant B** is for students with exceptionally high need (based on the FAFSA). During the first year of the award, Cal Grant B pays an Access Grant. PLNU credits these funds directly to the student's account to help pay down semester charges. However, the student has the option of receiving Access Grant funds as a check each semester by submitting a written request to the Student Financial Services office before the end of each semester Add Period. After that date, the semester Access Grant is credited to the student's account and may not be available for refund. During the second and subsequent years, Cal Grant B includes a tuition and fee-paying component in addition to Access. The award amount of the Cal Grant and Access Grant is determined upon approval of a final State of California budget.

### *Application Process for New Cal Grants*

Students must have submitted a 2017-2018 FAFSA ([www.fafsa.ed.gov](http://www.fafsa.ed.gov)) by March 2, 2017, and a verified grade-point average (GPA) to the California Student Aid Commission (CSAC) by the same date. High school seniors must request that their high school provide this information to CSAC electronically. Current PLNU students who are California residents and who have completed 24 or more college units will have their GPA electronically submitted to CSAC.

### *Renewal Cal Grants*

All Cal Grant recipients must meet income and asset ceiling and family size limits established annually by the California Student Aid Commission (CSAC) and meet Satisfactory Academic Progress (SAP) in order to have their Cal Grant renewed for the 2017-2018 Academic Year. Students may renew a Cal Grant award for up to four academic years (eight semesters). Submission of a verified GPA is not required to renew a Cal Grant. Students who received a Cal Grant at another institution must file a FAFSA and complete Form G-10 (Grant Record Change Form for Students) or contact CSAC at 1-888-224-7268.

For details about renewal requirements for the 2017-2018 Cal Grant, students may visit the California Student Aid Commission (CSAC) website at [www.csac.ca.gov](http://www.csac.ca.gov).

### *Cal Grant and The California Dream Act*

The California Dream Act of 2011 allows students without lawful immigration status but who meet certain requirements to apply for and receive state financial aid at California private colleges. The award amount of the Dream Act Cal Grant is determined upon approval of a final State of California budget.

For details about applying for a Cal Grant under the Dream Act, visit the California Student Aid Commission (CSAC) website at [www.csac.ca.gov](http://www.csac.ca.gov).

## **Additional State Grants**

### *Child Development Grant*

The Child Development Grant program is a need-based grant designed to encourage students to enter the field of child care and development, in a licensed children's center. Students who plan to enroll at least half-time in coursework leading to a Child Development Permit as teacher, master teacher, site supervisor, or program director are eligible to apply through PLNU. Students must sign a Service Commitment Agreement stating that they will provide one year of full-time service in a licensed children's center for each year they receive the grant.

### *Law Enforcement Personnel Dependent's Grant*

The Law Enforcement Personnel Dependents Grant (LEPD) is a need-based educational grant awarded to dependents and spouses of California peace officers (Highway Patrol, marshals, sheriffs, and police officers), employees of the Department of Corrections and California Youth Authority, and both full-time and permanent firefighters who have been killed or totally disabled in the performance of duty. Applications are accepted throughout the academic year.

### *Chafee Grant*

The California Chafee Grant program gives money to current or former foster youth to use for career and technical training, or college courses. The grant does not have to be repaid and is intended to help the student pay living expenses. The Chafee Grant, also known as the Education and Training Voucher (ETV), is a federally funded program and is subject to the availability of federal funds each year. To qualify, students must be a current or former foster youth and not have reached their 22nd birthday as of July 1 of the award year. The court must have established their dependency when they were between the ages of 16 and 18. The California Department of Social Services will verify their foster youth eligibility status.

## **The FAFSA Verification Process**

Any student who files a FAFSA may be selected for a process called "verification", either by the Department of Education or by the University. Verification is the process of confirming that the data reported on your FAFSA is accurate. PLNU has partnered with Inceptia's "Verification Gateway" as an approved third party servicer who assists PLNU in collecting all documents required to complete the process for any student selected by the Department of Education for verification. Students who may be selected for institutional verification will be contacted by PLNU's Student Financial Services (SFS) Office directly.

You may decline the request for verification documents but if you do, you are ineligible for any federal or state financial aid and for some forms of need-based institutional financial aid. It is recommended that all students complete the verification process as early as possible to avoid late notification of the loss of eligibility of financial aid.

## **PLNU Institutional Aid**

All forms of PLNU institutional aid are limited by semester charges and enrollment status. Award amounts are divided equally between fall and spring semesters, and generally cannot be used for summer session coursework. All forms of PLNU institutional aid, including merit-based awards, may be limited by the student's financial need. This means that in certain cases, institutional aid may need to be reduced or canceled if the student is receiving either federal or state need-based aid.

## Enrollment Status Requirements

All forms of institutional aid require full-time enrollment (12 units or more per semester) through the end of the Refund Period—the first eight weeks of the semester. Institutional aid is canceled for any student dropping below 12 units before that time. Graduating seniors may receive a prorated amount of institutional aid if enrolled less than full-time during their final academic year. Students with exceptional circumstances may be eligible to receive a prorated amount of institutional aid on an appeal basis only for a maximum of one semester. A written request must be submitted to and approved by SFS.

## Institutional Merit Awards

### Academic Scholarships

For first-time freshmen who begin attending PLNU during the 2017-2018 Academic Year, academic awards are awarded for an initial two-year period and, subject to maintaining renewal criteria, can be received for a maximum of eight (8) semesters. Continuous full-time enrollment is required (12 units or more per semester) to retain an academic scholarship. Renewal eligibility is based on the student's cumulative GPA (not rounded) calculated at the end of the fall or third semester of the second year of the award and each subsequent year. Any student not meeting the renewal criteria at that time will be given until the end of the spring or fourth semester to meet the qualifying cumulative GPA. **Once lost, an academic scholarship cannot be regained.**

Eligibility for an academic scholarship beyond eight (8) semesters may be considered on a case-by-case appeal basis but is limited to a maximum of ten (10) semesters of continuous enrollment at PLNU.

To be eligible for selection, first-time freshmen must:

- be offered admission to PLNU
- submit an official seven-semester high school transcript to PLNU by the deadline date
- meet all GPA, test score, and need requirements

#### *Bresee Need-Based Merit Award*

The Bresee scholarship is awarded to first-time freshmen as follows:

- They have a weighted high school cumulative GPA of  $\geq 3.50$  (not rounded) **AND** SAT of  $\geq 1300$  or ACT  $\geq 28$  **OR**  $\geq 3.80$  weighted cumulative GPA (not rounded) **AND** SAT of  $\geq 1030$  or ACT of  $\geq 20$  **AND** they have demonstrated unmet need based on completion of the FAFSA.

The Bresee Scholarship is renewable with a cumulative GPA of  $\geq 3.20$  (not rounded), calculated at the end of the fall semester of the second year. Unmet need will be determined for renewal based on the FAFSA filed in the student's sophomore year for junior year eligibility and junior year for senior year eligibility. The student's cumulative GPA and financial need will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. This award is given for a maximum of eight (8) semesters.

#### *Provost Scholarship*

The Provost's Scholarship is awarded to first-time freshmen with a weighted high school cumulative GPA of  $\geq 3.70$  (not rounded) **AND** a  $\geq 1200$  SAT (combined math and critical reading) or a score of  $\geq 25$  on the ACT.

#### *Trustee Scholarship*

The Trustee's Scholarship is awarded to first-time freshmen for the 2017-2018 Academic Year with a weighted high school cumulative GPA of  $\geq 3.80$  and a  $\geq 1300$  SAT (combined math and critical reading) or a score of  $\geq 28$  on the ACT.

#### *President Scholarship*

The President's Scholarship is awarded to first-time freshmen for the 2017-2018 Academic Year with a weighted high school cumulative GPA of  $\geq 4.00$  (not rounded) **AND** SAT of  $\geq 1450$  or ACT of  $\geq 32$ .

The Provost, Trustee, and President's academic scholarships are renewable with a cumulative GPA of  $\geq 3.40$  (not rounded), calculated at the end of the fall semester of the second year. The student's cumulative GPA will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. Each award is given for a maximum of eight (8) semesters.

## **Competitive Academic Scholarships**

#### *Full Honors Scholarship*

One Full Honors Scholarship will be awarded by the Admissions office to a first-time freshman for the 2017-2018 Academic Year. This award covers tuition expenses for the year. This scholarship is initially awarded for two years and is then renewable annually with a  $\geq 3.40$  cumulative GPA (not rounded) at PLNU. The student's cumulative GPA will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. This award is given for a maximum of eight (8) semesters.

#### *Science Honors Scholarships*

Prospective students invited to attend Point Loma Nazarene University's Science Honors Weekend event may be awarded a Science Honors Scholarship by faculty from the Science, Math, or Computer Science disciplines. Awarding of a Science Honors Scholarship is in addition to the offer of any PLNU Academic Scholarship. This scholarship is initially awarded for two years and is then renewable annually with a  $> 3.40$  cumulative GPA (not rounded) at PLNU. The student's cumulative GPA will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. This award is given for a maximum of eight (8) semesters.

## **Merit Scholarship Criteria for Incoming Transfer Students:**

A Transfer Merit Scholarship is available to new transfer students with 16 or more credit hours; eligibility criteria vary depending on the student's cumulative GPA and the number of college units completed, as shown below:

#### *Transfer Merit Scholarship \$6,000*

Transfer GPA of  $\geq 3.30$ - $3.59$

#### *Transfer Merit Scholarship \$8,000*

Transfer GPA of  $\geq 3.60$

The Transfer Merit Scholarships are renewable with a cumulative GPA of  $\geq 3.40$  (not rounded) calculated at the end of three full PLNU semesters. The student's cumulative GPA will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. It is awarded for a maximum of eight (8) semesters.

Transfer students with less than 16 units will be evaluated on a case-by-case basis for academic scholarship eligibility.

## Second Chance Merit Scholarship

Students who did not qualify for any academic award at the time they were admitted to PLNU may be considered for this award after completing at least three consecutive full-time semesters at PLNU, and attaining a cumulative resident GPA of  $\geq 3.70$  (not rounded and excluding study abroad, summer school, and transfer units). If eligible, this scholarship will be awarded for the following academic year. Applications for this award are available from the Student Financial Services office. Due to limited funding, all students who are eligible may not be awarded. A priority application deadline of March 2<sup>nd</sup> will be used to determine eligibility in the event of limited funding. Institutional need grants awarded to Second Chance Merit Scholarship recipients will be awarded according to the catalog policies in place for their cohort.

## Tuition Discounts

### *Pastor and Missionary Child Discount*

The Pastor's or Missionary Child Discount for the 2017-2018 Academic Year provides a percentage discount on tuition charges for the **dependent** children of Nazarene and non-Nazarene pastors.

For the **dependent child** of a pastor or missionary to qualify, each of the following statements must be true:

- The pastor must be a full-time - \*career senior pastor or in a full-time career member of the pastoral staff during the 2017-2018 Academic Year.
- The student is under the age of 24 during the academic year in which the discount is awarded.
- The student is not married.
- The student does not have children.
- The student is not a veteran of the U.S. Armed Forces.
- The student will be working on a B.A. or B.S. degree during the 2017-2018 Academic Year. (This award is given for a maximum of 8 semesters.)

\*" **Career**" is defined as someone whose full-time paid vocation is a licensed or ordained pastoral ministry position. NOTE: To be considered career ministry, the parent in ministry's current primary source of income must come from their involvement in full-time pastoral (pulpit) ministry. Proof of valid denominational ordination or licensing for the parent named will be required for all first time Pastor Child Discount applicants but is not a guarantee of eligibility. Verification of housing or parsonage allowance may be required. Due to limited resources, eligibility is not extended to non-profit, para-church, or church administrative or support staff, or independent children of pastors.

Students wanting to apply for either the Pastor's or Missionary Child Discount may obtain an application form from the Student Financial Services office or the PLNU website. Tuition discounts are not automatically renewable and continued qualifying employment may be verified.

## Institutional Grants

### *Church Scholarship, Nazarene Grant-in-Aid and District Grants*

The Nazarene Matching Grant program is for Nazarene students from the Southwest Educational Region of the Church of the Nazarene (#9), which is comprised of the following districts: Anaheim, Arizona, Central California, Hawaii, Los Angeles, New Mexico, Northern California, Sacramento, Southern California, Southwest Latin America, Southwest Native American, and Western Latin America.

The program consists of three awards: the Church Scholarship, the Nazarene Grant-in-Aid, and a District Grant. In order to receive these three awards, the student's home Nazarene church must send PLNU a Church Scholarship check (up to \$250 per year). PLNU matches this with the Nazarene Grant-in-Aid (up to \$250 per year) and also applies the appropriate District Grant. (District Grant award amounts may vary by district and are determined by the Board of Trustees during the annual budgeting process.) A student whose home Nazarene church does not participate in the matching grant program may still be able to receive District Grant funds if the church's pastor sends a written request to the Student Financial Services Office on church letterhead.

For students living on-campus, these three awards can be used to help pay tuition and mandatory fees or on-campus room and board charges. For students living off-campus, the awards are restricted to tuition and fees. Neither the Church Scholarship nor the Nazarene Grant-in-Aid can be refunded to the student. However, for off-campus students whose total financial aid exceeds semester charges, the student may use District Grant funds to purchase a commuter meal plan.

Students may receive the Church Scholarship, Nazarene Grant-in-Aid, and District Grant during the fall and spring semesters only, for up to ten regular semesters. Full-time enrollment (12 units or more per semester) is required through the end of the refund period.

It is the student's responsibility to contact the church and request that it send the Church Scholarship check to PLNU. If the church does not send the money within one week of priority registration, the Church Scholarship, Nazarene Grant-in-Aid, and District Grant will be removed from the student's financial aid awards.

The student should contact the church as early as possible during the academic year to find out if there are any special eligibility requirements (i.e., a minimum period of church attendance, church involvement, etc.) or if it requires submission of an application form.

## **Need-Based Institutional Aid**

### *Point Loma Forward Grant*

The Point Loma Forward Grant is awarded to students with financial need and who meet all eligibility requirements. To be considered, students must have filed a FAFSA for the academic year in which they are awarded. Students will be awarded a Federal Direct Subsidized Loan and Federal Work Study before being awarded a Point Loma Forward Grant for the 2017-2018 Academic Year. Renewal of institutional need grants for returning students is dependent upon continued eligibility under the awarding criteria for that cohort and the availability of funds.

### *Point Loma Community Grant*

The Point Loma Community Grant is awarded to students who demonstrate unmet need after all other forms of need-based financial aid have been awarded and who are not the recipient of a PLNU academic scholarship. To be considered, students must have filed a 2017-18 FAFSA. Renewal of a Point Loma Community Grant requires continued eligibility under the awarding criteria for that cohort and is subject to availability of funds.

### *Point Loma Legacy Grant*

The Point Loma Legacy Grant may be awarded to students who have at least one parent who attended or graduated from Point Loma Nazarene College/University, who were not awarded in excess of the maximum allowable forms of institutional aid, and who demonstrated remaining unmet need, and is subject to the availability of funds. To be considered, students must have filed a 2017-18 FAFSA. Renewal of a Point Loma Legacy Grant requires continued documented unmet need as verified by completion of a FAFSA, and is subject to availability of funds.

## **Performance Awards**

### *Athletic Scholarship*

The student should contact the Intercollegiate Athletic Department at (619) 849-2265 or go to <http://www.plnusealions.com>. For students who live on-campus, athletic scholarships can only be used to help pay tuition, mandatory and other fees, and on-campus room and board. A completed Athletic Scholarship Agreement (ASA) must be submitted to the Student Financial Services Office and the student-athlete given athletic clearance before athletic scholarship funds will be disbursed to the student account. Student-Athletes who receive any form of PLNU athletically-related scholarship are not eligible for an institutional need-based grant. All NCAA Division II rules and requirements must be followed in order to be eligible for and to retain an athletic scholarship and to participate on an athletic team.

### *Forensics Scholarships*

The student should contact the forensics coach in the Department of Communication and Theatre at (619) 849-2391 ([www.pointloma.edu/communication](http://www.pointloma.edu/communication)).

### *Music Scholarships*

The student should contact the department assistant in the Department of Music at (619) 849-2445 ([www.pointloma.edu/music](http://www.pointloma.edu/music)).

### *Theatre Scholarships*

The student should contact the department chair in the Department of Communication and Theatre at (619) 849-2248 ([www.pointloma.edu/communication](http://www.pointloma.edu/communication)).

## **Elected or Appointed Office Institutional Aid**

### *ASB and Resident Assistantships (RA)*

Both Associated Student Body (ASB) Leadership and RA Awards are treated as need-based if the student's financial aid awards include any form of federal or state need-based aid. This means that an ASB or RA award may have to be reduced or in rare cases, canceled to prevent the student from being funded in excess of financial need.

An alternative to having all or a portion of an RA award reduced or canceled to avoid over-awarding may be for the student to receive the excess award through student payroll. Under this option, the student will receive the amount of the excess as payroll which then must be reported to the IRS.

**RA awards are based on the equivalent of the maximum meal plan with the exception of RA's assigned to Flex housing who are awarded the equivalent meal plan for Flex residents.**

ASB Scholarships are awarded each semester with a portion paid as a stipend directly to the student and a portion awarded as a form of financial aid. ASB Stipends are subject to a Board of Review process and the final amount is contingent upon a student's successful completion of the duties associated with their leadership role. If a student does not perform satisfactorily, they may experience a reduction in the amount of the award. Students may be given the option of having the entire semester amount paid as a form of scholarship but should consult with the Student Financial Services Office before making a request.

The contact person for ASB awards is the Director of Community Life. The contact person for resident assistantships is the Dean of Students.

## **Departmental/School and Endowment Awards**

Each year, various academic departments and schools award a limited number of scholarships to selected students. Students should contact their academic department or school for applications and deadlines. Generally, students in their freshman year are not eligible for these awards.

A listing of endowed scholarships for the 2017-2018 Academic Year can be found on the PLNU website. Continuing students who are interested in applying for these scholarships should contact the appropriate academic department or the Student Financial Services Office for application information.

## **Financial Aid from Outside Agencies**

Various organizations, such as businesses, community groups, churches, administer scholarships based on merit, athletics, community service, organizational affiliation, academic performance, or educational objective. Some of these awards require financial need. It is the student's responsibility to research outside scholarship opportunities. Once awarded, it is the student's responsibility for contacting the outside agency sponsoring the scholarship award and requesting that it send the scholarship check to PLNU. Outside scholarship awards are always divided evenly over both the fall and spring semesters, unless the scholarship donor specifically states otherwise. Even if the scholarship donor sends the funds directly to the student, the award must still be treated as a resource, which means that other aid in the student's financial aid may need to be reduced or canceled to prevent the student from being funded in excess of campus charges, financial need, or cost of attendance. **Students must notify Student Financial Services of any outside scholarship awarded to them during an academic year.**

## **ROTC and Vocational Rehabilitation**

Both Reserve Officers Training Corps (ROTC) and Vocational Rehabilitation (Voc Rehab) help students to pay tuition and fee charges. Award amounts must be verified by the organization providing the financial assistance. Vocational Rehabilitation is treated as need-based aid and can limit a student's eligibility for merit and other need-based financial aid programs.

## **VA Benefits**

Veterans Administration (VA) benefits are awarded to veterans of the Armed Services and dependents who qualify. These funds may count against the student's eligibility for other institutional need-based financial aid programs. VA Benefits are certified by the university and may be paid directly to the student or credited to their student account.

### *The Yellow Ribbon Program*

The Yellow Ribbon GI Education Enhancement Program (Yellow Ribbon Program) is a provision of the Post-9/11 Veterans Educational Assistance Act of 2008. This program allows institutions of higher learning (degree granting institutions) in the United States to voluntarily enter into an agreement with VA to fund tuition expenses that exceed the highest public in-state undergraduate tuition rate. Point Loma Nazarene University will match up to \$10,000 of remaining tuition charged after the primary Chapter 33 tuition benefit has been certified and verified by the VA. Amounts and number of awards are dependent on available funds for each academic year and are not guaranteed to applicants until the final budget is approved by the Board of Directors. Award decisions will be made in writing to the eligible students. Students awarded a Yellow Ribbon Program Grant may not be eligible for institutional need-based aid.

Only individuals entitled to the maximum benefit rate (based on service requirements) may receive this funding. Therefore, a student may be eligible if:

- They served an aggregate period of active duty after September 10, 2001, of at least 36 months.
- They were honorably discharged from active duty for a service-connected disability and they served 30 continuous days after September 10, 2001.

- They are a dependent eligible for Transfer of Entitlement under the Post-9/11 GI Bill passed on a veteran's service under the eligibility criteria listed above.
- They are accepted for admission at PLNU for the 2017-2018 Academic Year, they are an applied student or they are in good academic standing as a returning student; applied and returning students must be registered as a full-time student at the time the award is disbursed.

PLNU Yellow Ribbon Grants will be awarded after submitting:

- A valid Yellow Ribbon Certificate of Eligibility from the Veteran's Administration certifying eligibility for the Yellow Ribbon Program ([www.gibill.va.gov](http://www.gibill.va.gov)).
- Returning Students: Documentation confirming status as a student in good academic standing for the current academic year is required.

## Other Resources

If a student receives any form of non-PLNU financial assistance, such as outside scholarships or veterans benefits, the SFS Office may have to reduce previously awarded financial aid so that funding does not exceed the cost of attendance, institutional charges, or financial need as determined by completion of the FAFSA. Whenever possible, the SFS Office will reduce Federal Work-Study and loan amounts before adjusting grant or scholarship assistance.

## Tuition Remission

PLNU employees and their dependents may be eligible for tuition remission and should contact the Office of Human Resources at (619) 849-2200 or go online at [www.pointloma.edu/HumanResources](http://www.pointloma.edu/HumanResources) for more information.

Students taking graduate-level courses must complete an Application for Tuition Remission Form each academic year enrolled. Tuition discounts are not automatically renewable for dependent students. The employment status for the PLNU employee will be verified with Human Resources each subsequent year of enrollment prior to renewal of the dependent student's tuition remission benefits.

If a dependent student of a PLNU employee earns a PLNU academic scholarship, the amount of tuition remission must be reduced by the amount of the academic award. If the student has remaining unmet need as determined by the FAFSA, they may be awarded up to a maximum of \$4,000 of their earned academic scholarship to apply for the cost of attendance, including on-campus room and board.

In addition, a limited number of students whose parents are employed at Council of Christian Colleges and Universities (CCCU) institutions may be eligible for tuition remission benefits. These students must apply through the PLNU Admissions Office to determine their eligibility for this benefit.

NOTE: Although tuition remission is a benefit, it is a resource and may limit the student's eligibility for federal, state, and institutional aid.

Tuition remission benefits (including CCCU) may never be applied to study abroad charges.

## Limits of Financial Aid Awards

For students living on-campus, semester charges include tuition, mandatory fees (not including travel fees), and on-campus room and board charges. For students living off-campus, semester charges include tuition and mandatory fees only. Regardless of the student's housing status, institutional aid (including endowed awards) can never exceed semester charges.

**Students Living On-Campus:** the only types of aid that can exceed semester charges are: Pell Grant, Federal SEOG, Federal Work-Study, and loans. External scholarships (excluding the Nazarene Church Scholarship) can also exceed

semester charges, provided the student files a FAFSA and demonstrates unmet financial need at the time the outside scholarship is added to the student's financial aid.

**Students Living Off-Campus:** the only types of aid that can exceed semester charges are: Pell Grant, Federal SEOG, Federal Work-Study, loans, and outside scholarships (excluding the Nazarene Church Scholarship). Exceptions may be granted by written appeal.

**Students Studying Abroad:** PLNU faculty-led programs are run by PLNU faculty through specific departments on campus. PLNU partner programs are sponsored through partner universities around the world. Affiliated programs are sponsored through organizations that have a formal relationship with PLNU. Credits are usually earned in another university and then transferred to PLNU. All study abroad programs must be approved by the PLNU Office of Global Studies.

For approved programs with partner institutions, federal and state grants and loans, along with PLNU institutional scholarships and grants may be used to pay program costs. For PLNU faculty-led programs, federal and state grants and loans may be used; the amount of PLNU institutional scholarships and grants that may be used varies by program. What is included with the cost of each program varies, but tuition, fees, and housing are standard for almost every program. In some cases, meals are also included. Extra travel and normal day-to-day expenses are extra.

Tuition remission benefits (including CCCU) may never be applied to cover study abroad charges.

**Summer Session Financial Aid:** Summer academic sessions at PLNU are considered a "trailer" (or final semester) for the Fall/Spring Academic Year for the purpose of awarding financial aid. Any student accepted for admission to the university as part of the incoming Fall cohort who has been approved to begin taking classes during the summer session prior to the cohort start date will not be eligible for PLNU institutional aid. Students may have remaining eligibility for federal or state financial aid under the appropriate FAFSA year and are advised to meet with a Student Financial Services Advisor prior to enrolling in summer courses.

## **Satisfactory Academic Progress (SAP)**

In accordance with the Higher Education Act of 1965, as amended, all post-secondary institutions must establish a Satisfactory Academic Progress (SAP) policy.

The SAP policy below reflects federal regulation changes effective July 1, 2011. PLNU students must adhere to a policy of Satisfactory Academic Progress (SAP) to retain eligibility for Federal and State financial aid. The policy consists of a qualitative (GPA) and quantitative (unit) standard. Student Financial Services (SFS) conducts a SAP review at the end of each semester, including summer session.

### **Qualitative Standard (GPA Requirement)**

Undergraduate students must maintain a minimum cumulative grade point average of 2.00 at the end of each semester.

### **Quantitative Standard (two parts):**

#### *1. Minimum Unit Completion*

Students must complete at least two-thirds (66.7%) of the cumulative units attempted at the end of each semester or summer session (if registered for summer courses). Units are rounded down to the nearest whole unit.

Example: If a student were to attempt 30 units during the academic year, the SAP policy would require that student to complete at least 20 units ( $30 \times 66.7\% = 20$ ). If a student were to complete fewer than 20 units they would have failed SAP because of a unit deficiency. This deficiency would equal 20 units minus the number of units that were completed. For example, completion of only 15 of 30 attempted units would result in a deficiency of 5 units (20 minus

15). To regain SAP, a student would have to complete 66.7% of the cumulative units attempted at the end of each semester or summer session (if registered for summer courses) in addition to the five deficient units.

## 2. Maximum Unit Completion

Under federal regulations, undergraduate students are eligible to receive federal financial aid for up to 150% of the published length of their academic program.

Since the PLNU Undergraduate program is designed to be completed in four years and 128 units, students will not be eligible for federal financial aid after attempting 192 units (including transferred coursework) or beyond the sixth year of undergraduate study (part-time study may extend, but on an appeal basis).

A financial SAP appeal is dependent upon meeting PLNU's academic Satisfactory Academic Progress standards. For more complete information on the university's financial SAP policies, students may visit the Student Financial Services Undergraduate section of the PLNU website.

## Academic and General Policies

### Applicable Catalog

The student is ultimately responsible for the fulfillment of all requirements for graduation in the Catalog in effect at initial enrollment. Those who opt for a subsequent Catalog, however, must notify the Office of Records and meet all requirements in that Catalog. Students who have not been registered for two or more consecutive semesters come under the Catalog in effect at the time of re-entry. Only one Catalog can be selected, and all requirements from that Catalog must be met.

### Course Load

#### Traditional Student Population:

The normal academic course load is 15-17 units per semester, including any concurrent units at another institution. Summer academic course load is 6 units per session and 12 units per summer, including concurrent units. Students in their first semester at PLNU are limited to 17 units per semester. Students on academic probation and academic probation alert status are limited to 13 units per semester (a total of 9 in the summer). If a student in good academic standing finds it necessary to carry a load greater than the normal load, the maximum number allowed is determined by the student's grade-point average. Students may, in consultation with the Vice Provost for Academic Administration, assume a course overload according to the following table:

Minimum GPA	Maximum Load
2.500	18 units
2.750	19 units
3.000	20 units

#### LEAP Student Population:

The LEAP course load is a maximum of 14 units in the fall semester, 14-17 units in the spring semester, based on fall GPA.

- LEAP students who earn a fall GPA between 1.800 and 2.799 will carry a maximum spring load of 14 units.
- LEAP students who earn a fall GPA of 2.800 or greater will carry a maximum spring load of 17 units.

One semester unit represents an hour (minimum 50 minutes) of class per week for at least 15 weeks (Carnegie definition). Three hours of laboratory are equivalent to one hour of class (minimum 50 minutes). Two hours of preparation are normal for each hour of class. Transfer work on the quarter system converts as three units equal to two semester units. Academic unit leadership will monitor the unit of credit policy through the course syllabus, schedule and faculty governance policies and processes. This information is below under Credit Hour Policy.

## Transcripts

Transcripts include all academic coursework across all programs of study and are available from the Office of Records. Official transcripts cost \$5.00 each and can be ordered through the student/alumni portal or by going to the National Student Clearinghouse website (<https://mystudentcenter.org/>). Requests not submitted through online ordering require an Official Transcript form from the Records Office website and a student's handwritten signature. Transcripts marked for pick up will not be released to anyone other than the student except by a signed, written authorization submitted to the Records Office; photo i.d. is required for pick up. Unofficial transcripts are free and available through the student portal as well as at the Office of Records. Official transcripts require approximately 10 business days for processing before being released. Expedited processing and mailing options may be available for an additional fee.

## Academic Calendar

The academic year at PLNU is divided into fall and spring semesters of 15 weeks, followed by two summer sessions. A complete listing of important dates is found in the Catalog as well as on the website. In addition, the university posts on its website class schedules that contain information about course offerings, fees, and other details pertinent to these terms of study.

## Course Schedules

All schedules are posted on the website. Current students, staff, and faculty should refer to the course schedule in the portal for the most up-to-date information. The schedule of course offerings, complete with final examination times, are available each spring for the following year's classes. Also, early in the spring semester a schedule of summer session classes is posted. The university reserves the right to cancel any class with fewer than ten students and make necessary changes in its schedule and programs.

## Credit Hour Policy

According to the United States Department of Education with regard to the credit hour definition, one semester unit represents an hour (minimum fifty minutes) of class time per week for at least 15 weeks (Carnegie definition).

- Face-to-face instructional hours are equivalent to the following:
  - 1 credit hour = 750 minutes instructional time
  - 2 credit hours = 1500 minutes
  - 3 credit hours = 2250 minutes
  - 4 credit hours = 3000 minutes

- Two hours of preparation are normal for each hour of class. Three hours of laboratory are equivalent to one hour of class (minimum 50 minutes). Transfer work on the quarter system converts as three units equal to two semester units.
- Web-Facilitated courses use web based technology to facilitate what is essentially a face to face course. These offerings can be up to 25% online/web based work.
- Hybrid or Blended courses use online and face to face delivery. A substantial proportion of the content (between 26% and 79%) is delivered online, and it typically uses online discussion and has a reduced number of face to face meetings.
- Online courses have the majority of content online and typically do not have face to face meetings.

Academic unit leadership will monitor the unit of credit policy through the course syllabus, schedule, and faculty governance policies and procedures.

## Academic Honesty

The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose.

Violations of academic honesty include cheating, plagiarism, falsification, identity fraud, aiding academic dishonesty, and malicious interference.

*Cheating* is the use of unauthorized assistance that results in an unfair advantage over other students. It includes but is not limited to: Bringing and/or using unauthorized notes, technology or other study aids during an examination; looking at other students' work during an exam or in an assignment where collaboration is not allowed; attempting to communicate with other students in order to get help during an exam or in an assignment where collaboration is not allowed; obtaining an examination prior to its administration; allowing another person to do one's work and submitting it as one's own; submitting work done in one class for credit in another without the instructor's permission.

*Plagiarism* is the use of an idea, phrase or other materials from a source without proper acknowledgment of that source. It includes but is not limited to: The use of an idea, phrase, or other materials from a source without proper acknowledgment of that specific source in a work for which the student claims authorship; the misrepresentation and/or use of sources used in a work for which the student claims authorship; the use of papers purchased online as all or part of an assignment for which the student claims authorship; submitting written work, such as laboratory reports, computer programs, or papers, which have been copied from the work of other students, with or without their knowledge and consent.

*Falsification* is the alteration of information or forging of signatures on academic forms or documents. It includes but is not limited to: using improper methods of collecting or generating data and presenting them as legitimate; altering graded work and submitting it for re-grading; falsifying information on official academic documents such as drop/add forms, incomplete forms, petitions, recommendations, letters of permission, transcripts or any other university document; misrepresenting oneself or one's status in the university.

*Academic identity fraud* is the act of allowing a person to impersonate the registered student, by doing the academic work and by submitting it as if it were the work of the registered person. This encompasses both face to face and online environments. It includes, but is not limited to: having another person complete a course assignment, take an examination, respond to discussion board questions, or complete any kind of academic exercise on behalf of the registered student. In such cases, it may be considered collusion to commit fraud on the part of both parties.

*Aiding academic dishonesty* is assisting another person in violating the standards of academic honesty. It includes but is not limited to: Allowing other students to look at one's own work during an exam or in an assignment where collaboration is not allowed; providing information, material, or assistance to another person knowing that it may be used in violation of academic honesty policies; providing false information in connection with any academic honesty inquiry.

*Malicious intent* is misuse of academic resources or interference with the legitimate academic work of other students. It includes but is not limited to: removing books, journals or pages of these from the library without formal checkout; hiding library materials; refusing to return reserve readings to the library; damaging or destroying the projects, lab or studio work or other academic product of fellow students.

A student remains responsible for the academic honesty of work submitted in PLNU courses and the consequences of academic dishonesty beyond receipt of the final grade in the class and beyond the awarding of the diploma. Ignorance of these catalog policies will not be considered a valid excuse or defense. Students may not withdraw from a course as a response to a consequence.

### **Response Procedure**

The following response procedure is recommended to faculty who discover a violation of academic honesty:

1. **Fact-finding:** The faculty member should attempt to speak or otherwise communicate informally with the student as a first step.
2. **Communication of Consequence:** Once the violation is discovered, the instructor should send a written communication to the student regarding the incident and the consequences. Instructors can give students an "F" on a specific assignment or an "F" in the course as a consequence of violations of academic honesty. In cases of academic identity fraud, the act or acts could be interpreted as a criminal offense and could mean administrative withdrawal from Point Loma Nazarene University.
3. **Internal Communication:** The instructor should send a report of the incident to the department chair or school dean, the college dean, the Vice President for Student Development and the Vice Provost for Academic Administration. The report should include a description of the violation, the action taken, and evidence of the violation. The official record of the incident is maintained by the Office of the Vice President for Student Development.
4. **Further action:** Prior instances of misconduct under this or other student conduct policies should be considered in determining disciplinary action for a present violation. As the Vice President for Student Development and the appropriate college dean consult, if additional action seems necessary it would be taken after consultation with the reporting instructor and communicated in writing to the student. Depending upon the seriousness of the incident or pattern of incidents, further actions can include probation, suspension or expulsion.

### **Appeal Procedure**

The following appeal procedure should be used by a student who wishes to appeal consequences associated with a finding of academic dishonesty:

1. **Instructor:** The student should present a written appeal of the penalty to the instructor involved. The instructor should respond in writing, with a copy of the response also sent to the department chair.
2. **Department Chair or School Dean:** In the event that satisfactory resolution to the appeal is not achieved between the student and the instructor, the student may submit the appeal in writing to the department chair or school dean, who will review the appeal and send a written ruling to the student and instructor.
3. **College Dean:** Student appeals not resolved at the departmental or school level should be taken to the appropriate college dean for review. The college dean will review the appeal and send a written ruling to the student, instructor and department chair or school dean.
4. **Administrative Committee:** Student appeals not resolved at the college dean level can be submitted to an administrative committee including an academic administrator of the student's choice, the Provost or a designee, the Vice Provost for Academic Administration, and the Vice-President for Student Development or a designee. The appeal decision reached by this committee is final.

Revision based on review academic honesty policies at Purdue University, University of Notre Dame, Wheaton College, Azusa Pacific University and The University of Rochester. Definitions based on those at The University of Rochester and used by permission.

## **Class Attendance**

Regular and punctual attendance at all classes in which a student is registered is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal requirements to be met. There are no allowed or excused absences except as approved in writing by the Provost for specific students participating in certain university-sanctioned activities.

Excused absences still count toward the 10%-20% limits, but allow students to make up work, quizzes, or tests missed as a result of a university-sanctioned activity. Activities of a unique nature, such as labs or other activities identified clearly on the syllabus, cannot be made up except in rare instances when instructors have given advanced, written approval for doing so.

Whenever the number of accumulated absences in a class, for any cause, exceeds ten (10) percent of the total number of class meetings, the faculty member should send an e-mail to the student and the Vice Provost for Academic Administration (VPAA) warning of attendance jeopardy.

If more than twenty (20) percent of the total number of class meetings is reported as missed, the faculty member or VPAA may initiate the student's de-enrollment from the course without further advanced notice to the student.

If the requirements of a university-sanctioned activity extend beyond the normal annual demands, the procedure approved by faculty and outlined in the Student Athletic Handbook will be followed.

If the date of de-enrollment is past the last date to withdraw from a class, the student will be assigned a grade of W or WF consistent with university policy in the Grading section of the catalog. There are no refunds for courses where a de-enrollment was processed.

Absences are counted from the first official meeting of the class regardless of the date of the student's enrollment. Consequently, a student who registers late must monitor carefully regular attendance during the remainder of the semester. Registered students who neither attend the first class session nor inform the faculty of their desire to remain in the class may, at the request of the instructor, be dropped from the class.

Exceptions to the foregoing attendance regulations due to extenuating circumstances may be granted only by appeal to the Vice Provost for Academic Administration. Students are responsible to consult the syllabus of each course for specific applications of and elaborations on the above attendance policy.

NOTE: Ultimately, students are solely responsible for their registrations and any financial implications. Inaccurate course registrations can lead to a grade of "F" for failure to complete a course and not dropping by the last day to drop, or no credit allowed if the course is not registered for by the last date to add. Please see the academic calendar for appropriate dates.

## **Academic Behavior Policy**

Both faculty and students at Point Loma Nazarene University have the right to expect a safe and ordered environment for learning. Any student behavior that is disruptive or threatening is a serious affront to Point Loma Nazarene University as a learning community. Students who fail to adhere to appropriate academic behavioral standards may be subject to discipline. Although faculty members communicate general student expectations in their syllabi and disruptive student conduct is already addressed in the Undergraduate Student Handbook, the purpose of this policy is to clarify what constitutes disruptive behavior in the academic setting and what actions faculty and relevant administrative offices may take in response to such disruptive student behavior.

"Disruption," as applied to the academic setting, means classroom, instructor or classmate-related student behavior that a reasonable faculty member would view as interfering with or deviating from normal classroom, class-related, or other faculty-student activity (advising, co-curricular involvement, etc.). Faculty members are encouraged to communicate positive behavior expectations at the first class session and to include them in course syllabi. Examples of disruptive classroom behavior include, but are not limited to:

- persistent speaking without being recognized or interrupting the instructor or other speakers;

- overt inattentiveness (sleeping or reading the newspaper in class);
- inordinate or inappropriate demands for instructor or classroom time or attention;
- unauthorized use of cell phone or computer;
- behavior that distracts the class from the subject matter or discussion;
- unwanted contact with a classmate in person, via social media or other means;
- inappropriate public displays of affection;
- refusal to comply with reasonable instructor direction; and/or
- invasion of personal space, physical threats, harassing behavior or personal insults.

The policy applies if the behavior is reported by a faculty member or academic administrator and occurs exclusively or primarily in a student-faculty member interaction. Incidents which involve both academic and non-academic behavior may result in responses coordinated by the Vice Provost for Academic Administration and the Dean of Students.

Civil and polite expression of disagreement with the course instructor, during times when the instructor permits discussion, is not in itself disruptive behavior and is not prohibited.

Some students possess medical or psychological conditions that may affect functioning within the standards of the university. Although such students may be considered disabled and are protected under the Rehabilitation Act/ADA, they are required to meet the fundamental university academic and behavioral policy as described in the Student Handbook, Undergraduate Catalog and/or faculty syllabi.

### **Response Procedure**

The following response procedure is recommended to faculty who witness or experience disruptive behavior, either in the classroom or in contact with an enrolled student outside the classroom. Depending on its severity, disruptive behavior would result in responses from an escalated use of the strategies below:

1. Verbal and/or written request to stop behavior and warning of potential consequences.
2. Exclusion from the current class period/activity.
3. E-mailed report to dean, Vice Provost for Academic Administration and Vice President for Student Development (in cases of a severe instance, or multiple instances) using Classroom Behavior Report Form (to be developed) which, depending on faculty wish and severity, may result in:
  - Filing of report and no further action.
  - Student meeting with VPAA and Dean of Students to develop and sign classroom behavior and growth plan detailing appropriate behaviors and consequences for failure to comply.
4. Depending on the frequency and severity of the student behavior, consequences may include permanent exclusion from a specific class up to and including administrative withdrawal from the university.

Note: Faculty should immediately report by phone students in an academic context who express either intent to harm themselves or to harm others to the Office of the VPAA or the Dean of Students, in that order. (Staff are instructed to report non-academic incidents to the Dean of Students.) If events occur in classes after university business hours, faculty should call Department of Public Safety and ask to speak to the highest ranking officer who will notify administrative personnel. Students who report tendency to self-harm will not be subject to disciplinary action for making PLNU officials aware of that tendency.

Developed in consultation with Student Development and the Disability Resource Center (DRC) after review of similar policies at other institutions including University of Arizona and Colorado State University.

## **Academic Accommodations**

While all students are expected to meet the minimum academic standards for completion of their courses as established by the instructors, students with special needs may require academic accommodations. At Point Loma Nazarene University, students requesting academic accommodations must file documentation with the Disability Resource Center (DRC), located in the Bond Academic Center. Once the student files documentation, the Disability Resource Center contacts the student's instructors and provides written recommendations for reasonable and appropriate

accommodations to meet the individual needs of the student. This policy assists the university in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with special needs and guarantees all qualified students equal access to the benefits of PLNU programs and activities.

Students have the right to appeal decisions regarding academic accommodations. In order to provide prompt and equitable resolution, the student must submit a written or verbal statement to the Director of Academic Advising who will conduct the appeal process in consultation with the Vice President for Student Development.

## **Examinations and Reports**

Examinations may be deferred due only to illness or because of other equally valid conditions over which the student has no control. Faculty report to administration as early as possible any student who, for any reason, is in danger of failing a course. Those students whose work is falling below a "C" average are referred to the Academic Support Center. Faculty are asked to make mid-semester grades available to students. Grades of "D" and "F" are reported to the Vice Provost for Academic Administration and the Director of Academic Advising for follow-up interventions.

## **Grading**

Letter grades (A, B, C, D, F) including plus and minus grades are used to indicate the level of scholarship earned for each course. Once the degree has been posted on the student's official transcript, no change of grade action is allowed.

### **[CR] Credit**

The grade utilized for designated courses which are graded only on a Credit/No Credit basis. Courses graded by this designation are counted toward a student's total number of units but have no grade-point value and no effect on the grade-point average. The "CR" grade is also assigned to units earned through Pass/No Credit courses as well as Advanced Placement (AP).

### **[NC] No Credit**

The grade recorded for all non-passing work in those courses graded on a Credit/No Credit basis and for those courses taken on a Pass/No Credit basis. The NC grade has no grade-point value, has no effect on the grade-point average and yields no earned credits.

### **[F] Failure**

This grade is given for unsatisfactory performance in a course where an NC is not applicable. If the course taken at this university is repeated here, the F remains on the permanent record, but only the higher grade earned for the course is computed in determining the grade-point average. See "Repeated Courses."

### **[H] Audit**

Students may register for some courses at the university on an audit basis (indicated on the transcript by the letter H). The following conditions apply:

- An audit is taken by students for personal enrichment or review.
- No academic unit credit can be earned for an audited course.
- There is no expectation of interaction on the part of student or faculty member.

- Students may not incur excessive absences, as defined in this Catalog.
- Audits are available on a space-available basis only.
- An audit grading type cannot apply to a physical education activity course, studio art classes, performance classes, skill courses, beginning and intermediate foreign languages, laboratory sciences, fieldwork, internships, practicum experiences, study abroad, research, or private music lessons.
- Courses taken by audit may not revert to a credit course or vice versa after the first two weeks of the semester (or one week of a Quad course); and
- The student must indicate the audit election by the last day to add classes, with the approval of the student's academic advisor, and may not change the basis of registration for this course thereafter.

## **[I] Incomplete**

A grade of Incomplete is given for work which has been completed partially in a satisfactory manner, but which, for valid reasons such as illness or death in the family, is not finished. The grade of "I" is to be given only on the basis of extraordinary circumstances clearly beyond the student's control.

The grade of "I" is regarded as a deficiency grade and may be removed by the assignment of additional work to make up the deficiency; or, in cases where the "incomplete" is assigned because of inability to take a final examination, by a special examination. A grade of "I" must be made up, if at all, by the end of the next regular semester. Until made up, a grade of "I" is considered as "F" in determining the student's grade-point average, and eligibility for financial assistance and intercollegiate competition.

*Note: Federal fair use policy requires ending access to Canvas resources after three weeks. Instructors should keep this in mind when establishing incomplete grade resolution requirements and deadlines.*

## **[IP] In Progress**

A provisional grade used in certain courses which may extend longer than a semester (for a complete list of courses approved for the IP grade, students should contact the Office of Records). The grade of IP carries no grade points, and is replaced by the grade earned when the requirements for the course are properly completed. A grade of IP must be changed at the end of the next regular semester (summer is not a regular semester). If the course is not completed, the IP will be changed to an F.

## **[W] Withdrawn**

This grade is recorded when a student doing passing work is given permission by the Vice Provost for Academic Administration to drop a course after the deadline to drop classes. Withdrawal from a course past the deadline is only possible due to personal and/or family emergencies beyond the student's control.

## **[WF] Withdrawn under failing conditions**

This grade is recorded when a student officially withdraws from a course after the last date to drop and when the work is below passing at the time. A grade of WF is considered the same as an F in calculating the grade-point average.

## **Grade Points**

Letter grades are converted to numerical equivalents for computation according to the following scale:

Superior

Failing

The grade-point average is computed for each student, and a satisfactory grade-point average is necessary for continuance and for graduation.

## Major and Minor Requirements

**The Major.** Point Loma Nazarene University offers four baccalaureate degrees: the Bachelor of Arts (B.A.), the Bachelor of Music (B.Mus.), the Bachelor of Science (B.S.), and the Bachelor of Science in Nursing (B.S.N.). Many of the 50+ major programs also offer in-depth concentrations. If a second major area of study is desired, all requirements for both majors must be met with a minimum of 24 units distinguishing the two areas of study. While working on a single baccalaureate degree, the maximum number of pursuits is two majors and two minors. Students should review the majors and minors list in the catalog.

**The Minor.** Optional minors are offered in several schools and departments. The requirements governing minors are as follows:

- Only minors that appear in the student's catalog of record may be earned at the point of graduation;
- A minor is at least 16 units and is under the direct auspices of the respective school/department;
- Students must earn a 2.000 cumulative GPA in the minor for it to be granted;
- The minor must show a minimum of nine (9) units in residence;
- Of the 16+ units in the minor, nine (9) must be distinct from and not counted in the major;
- Of the 16+ units in the minor, 12 must be at the upper-division level;
- The pass/no credit option is not available for courses within the minor; and
- A second minor, when feasible, requires a minimum of nine (9) units distinct from and not counted either in the major or in the first minor.

## Non-Traditional Delivery Credits

Point Loma Nazarene University recognizes the place of non-traditional delivery systems in education and has developed policies and procedures to guide students in this regard. Online and/or hybrid courses utilizing technology-mediated instruction are also strictly controlled by the university's regional accrediting body. Consequently, the following guidelines both define the boundaries for distance learning modalities and protect the integrity of Point Loma's deeply held commitments to the learning environment.

### Policies:

1. The approval of online courses must always be on a case-by-case basis.
2. As academic units with a non-traditional delivery, online courses must be approved prior to enrollment in those courses and are limited to 12 semester units over the student's total degree program.
3. Online credits submitted to PLNU for approval must be offered by a regionally accredited institution of higher learning (the Western Association of Schools and Colleges, the Northwest Commission on Colleges and Universities, the Higher Learning Commission of the North Central Association of Colleges and Schools, Southern Association of Colleges and Schools, Middle States Association of Colleges and Schools, New England Association of Schools and Colleges).
4. The course must apply to comparable degree programs at the home institution in which it resides.
5. Students requesting consideration of an online course in transfer must submit an Academic Policy Petition, together with a hard-copy print-out of the course description and syllabus.
  1. If the course is to satisfy a major/minor requirement, then approval must be obtained from the department chair/school dean in which the course is required.
  2. If the course is to satisfy general education requirements, approval must be obtained from the department chair/school dean in which the content resides.

6. Following action from the appropriate department chair/school dean, the petition is submitted to the Vice Provost for Academic Administration for final evaluation.
7. All online courses must be graded by traditional methods (letter grades). Courses graded credit/nocredit will not be accepted.
8. Proctoring of examinations must be arranged and paid for by the student, as PLNU faculty/staff are not obligated to perform such tasks.
9. Online course approved by PLNU must be completed within twelve months of approval.

## **Procedures:**

1. Students interested in taking an online course should pick up an Academic Policy Petition at the Office of Records.
2. Students should check with the appropriate department chair/school dean for program specific guidelines for an online course.
3. Students should take the completed petition along with a course description and syllabus to the appropriate department chair/school dean as stated in the policy.
4. If approval is given, the completed petition should be taken to the Vice Provost for Academic Administration for final evaluation.
5. If final approval is given the student may enroll in the course.
6. The transcribed course grade must be submitted to the PLNU Office of Records within twelve months of approval of the course.

## **Pass/No-Credit Option**

An undergraduate student may elect to take a course on a Pass/No-Credit basis under the following circumstances:

- Completion of at least 24 semester units;
- Not more than one such course per semester;
- A maximum of 12 units toward graduation to be elected for such courses;
- The course selected must be an elective-not applied toward a requirement, or a required professional course (for credential); and
- The student must indicate the "Pass/No-Credit" election by the last day to add classes, with the approval of the student's academic advisor, and may not change the basis of registration for this course thereafter.

This option is not available for transfer courses taken by on-line delivery, after matriculation at Point Loma.

## **Course Grade Appeal**

It is the responsibility of the faculty to evaluate student performance and assign grades. The university has established a course grade appeal policy, however, that may be used when a student believes the syllabus was not followed in the grade calculation or if it is thought that grading was done in a capricious and arbitrary manner. The appeal policy does not include student dissatisfaction with a grade based on the faculty member's professional judgment. A Course Grade Appeal Form is available from the Vice Provost for Academic Administration and must be filed within one year from the end of the course in which the grade was given.

## **Freshman Forgiveness**

A non-transfer student who does non-passing work (a failing grade) in a class during the first semester of the freshman year may receive a "NC" for one course of up to 5 units and be placed on probation alert. Transfer students who have earned more than 12 units at another college or university, and LEAP students entering with conditional status, are not eligible for the provision of the NC grade.

## **Transfer from Non-Accredited Institutions**

Normally, units presented in transfer from an institution that is not accredited by one of the major regional agencies (the Western Association of Schools and Colleges; the Northwest Commission on Colleges and Universities; the Higher Learning Commission of the North Central Association of Colleges and Schools; Southern Association of Colleges and Schools; Middle States Association of Colleges and Schools; New England Association of Schools and Colleges) are not accepted, including Bible colleges and proprietary schools. Students may petition a limited number of such courses, not to exceed 12 semester units, by the established petition process to the appropriate academic department and schools, through the Vice Provost for Academic Administration. Petitions are accepted for consideration only after satisfactory completion (2.000 or higher) of at least 12 units at PLNU.

## **Repeated Courses**

Courses passed with a C or above may not be repeated (unless the course is noted as repeatable in the course description). However, students desiring to raise an unsatisfactory grade (any grade lower than C) in a course taken at this university may repeat the course. If this is done, each grade will appear on the transcript but the lower grade (only one) will not be used for grade-point calculations.

If a PLNU course graded with a C- or lower is repeated successfully at another institution (higher than a grade of F), the grade points from both courses are averaged into the cumulative GPA. A notation on the transcript of record states that the repeated units are not applied to graduation totals.

Students receiving veterans benefits may not be eligible for benefits when repeating courses. Further information regarding authorization of benefits for repeated courses may be obtained in the Office of Student Financial Services.

## **Classification of Students**

Regular undergraduate students are those who pursue, or are entitled to pursue, one of the established programs leading to graduation with the bachelor's degree. Part-time undergraduates are those who, for adequate reasons, are permitted to register for fewer than 12 units per semester. Special students are those who take elective courses not leading to a degree.

The classification for undergraduate students is as follows:

- FRESHMAN 0-24 units
- SOPHOMORE 25-56 units
- JUNIOR 57-88 units
- SENIOR 89+ units

## **Academic Standing**

Point Loma takes seriously a student's ability to make satisfactory progress toward the goal of a degree. At the conclusion of the fall and spring semesters, the academic progress of all undergraduate students is reviewed by the Vice Provost for Academic Administration either to confirm satisfactory standing or to make changes based on student cumulative or semester GPA. In addition to the category of Satisfactory Standing, student performance can result in classification at any one of four levels of academic concern.

## **Satisfactory Standing**

To maintain satisfactory standing and remain free of academic alert or probation, students must achieve a minimum cumulative 2.000 grade-point average. Those who maintain the minimum required grade-point average are in satisfactory scholastic standing and as such are making progress toward a degree. During their first semester of academic work, first-time freshmen must earn at least a 1.800 GPA, regardless of the number of units taken, to remain in good standing.

## **Levels of Academic Concern**

### **Academic Probation Alert**

Students whose cumulative GPA meets the minimum standard for academic good standing, but whose session GPA for any one semester falls below 2.000, are placed on alert status and limited to 13 units maximum during the probation alert period (a total of nine (9) during the summer). While not technically on academic probation, these students are under the supervision of the Office of the Vice Provost for Academic Administration.

### **Academic Probation**

Students whose cumulative GPA falls below 2.000 are placed on Academic Probation and limited to 13 units maximum during the probation period (a total of nine (9) during the summer). Probationary students who fail to earn a 2.000 session GPA the following semester may be disqualified from continuing at the university. A first semester GPA below minimum standard for a non-transfer student would count toward calculation of probation but would not count toward calculation of disqualification.

Students being readmitted to the university after a disqualification or a voluntary withdrawal while on probation or probation alert will be readmitted under probation regardless of their cumulative GPA in order to allow for monitoring of the student's progress.

*Note:* Students who receive federal, state, or veterans aid must meet certain qualitative and quantitative standards of academic progress. As a result, it may be possible for a student to be on academic probation at the university but be ineligible for federal, state and veterans aid. Additional information on PLNU's financial aid satisfactory progress policy is available in the PLNU Student Financial Services Office. The university works with students placed on academic probation to create links between them, faculty advisors, the Office of Student Development, and other support programs. Policies concerning students on academic probation are administered by the Vice Provost for Academic Administration.

### **Continuance on Academic Probation**

Students who are on probation and earn at least a 2.000 during the current session, but whose cumulative GPA is below 2.000, may be continued on academic probation. These students are under the supervision of the Office of the Vice Provost for Academic Administration.

### **Academic Disqualification**

Students whose cumulative GPA falls below 2.000 for two consecutive regular semesters and whose semester GPA is also below 2.000 will be disqualified from continuing at the university at the end of that second semester.

To be considered for readmission, students who are disqualified must:

- spend at least one regular semester away from the university (summer is not considered a regular semester);
- take 12 pre-approved units at another institution;

- present official transcripts that demonstrate a university cumulative GPA of 2.000 or above;
- meet with the Vice Provost for Academic Administration; and
- complete an application for readmission.

If readmitted, such students would be placed on Academic Probation and limited to 13 units in their first semester back to allow deep concentration on a lighter class schedule.

## Veterans and Progress Toward a Degree

Any students receiving veterans benefits who fail to maintain normal progress because of attendance, poor grades, or by reduction of course load are responsible for notifying the Student Financial Services Office so that it may notify the Veterans Administration. If withdrawal from the university occurs, veterans' benefits will be terminated as of the date of termination of enrollment. Grades of NC and F are reported to the Veterans Administration, and the student may be liable for repayment of benefits received.

## Athletic Eligibility

Academic performance must be adequate in order for athletes to participate in intercollegiate athletics. A faculty athletic representative certifies the eligibility of each player, and coaches ensure that only eligible students participate. Athletic eligibility conforms to policies of the National Collegiate Athletic Association Division II (NCAA).

## LEAP Academic Disqualification or Administrative Withdrawal

LEAP students who fail to meet certain academic standards may be subject either to disqualification or administrative withdrawal.

**Disqualification.** LEAP students may be disqualified during either fall or spring semesters.

- In fall semester, LEAP participants who receive grades of C- or better in FST 100 and WRI 101 but whose cumulative GPA falls below 1.800 will be disqualified.
- In spring semester, LEAP students who receive a grade of C- or better in FST 101, but whose cumulative GPA falls below 2.000 will be disqualified.

LEAP students who are disqualified will receive a letter from the Vice Provost of Academic Administration indicating they have been disqualified from continuing at the university. To be considered for readmission, LEAP students who are disqualified must:

- spend at least one regular semester away from the university (summer is not considered a regular semester);
- take 12 pre-approved units at another institution;
- present official transcripts that demonstrate a university cumulative GPA of 2.000 or above;
- meet with the Vice Provost for Academic Administration; and
- complete an application for readmission.

If readmitted, such students would sign a proposed Academic Improvement Plan, return on Academic Probation and enroll in a maximum of 13 units in their first semester back to allow deep concentration on a lighter class schedule.

**Administrative Withdrawal.** LEAP students may be disqualified at the end of either fall or spring semester.

- In fall semester, LEAP participants who receive grades of lower than C- in FST 100 or WRI 101 and whose cumulative GPA falls below 1.800 will be administratively withdrawn.
- In spring semester, LEAP participants who receive a grade of lower than C- in FST 101 and whose cumulative GPA falls below 2.000 will be administratively withdrawn.

LEAP students who are administratively withdrawn will receive a letter from the Vice Provost of Academic Administration indicating they have been administratively withdrawn from continuing at the university. Although this

withdrawal action offers no opportunity for appeal or readmission to LEAP, administratively withdrawn LEAP students who wish to do so can reapply directly through the Office of Admissions once they have completed 24 or more transferable units at another institution with a 2.800 or higher cumulative GPA.

## **Withdrawal from the University**

Any student who has no unpaid accounts or charges of misconduct is entitled to an honorable withdrawal. The student must contact the Office of Records to begin the formal withdrawal process for any break in registration prior to graduation. In extreme cases where the student must withdraw during the semester and after the last day to drop courses, permission must be granted by the Vice Provost for Academic Administration (see "Grading").

## **Registration Limitations**

### **Concurrent Enrollment**

A registered student may not transfer credit for a course taken concurrently at another institution if a similar course is offered at the university at any time during the academic year except by prior approval of the Vice Provost for Academic Administration. Forms for such transfer of credit are available in the Office of Records. Course approvals are required for work taken during the summer while the student is not in attendance at this university. In computing a student's maximum load, all courses being taken are considered.

### **Transfer Limitations**

A combined maximum of 70 units may be transferred to PLNU from the following sources: community colleges, AP, CLEP, and IB. All such courses are, by definition, lower-division level. In no case will a lower division course transfer to meet an upper-division course requirement.

### **Curricular Exceptions**

Any petitions for academic exceptions to stated Catalog requirements and policies must be presented to the Vice Provost for Academic Administration. A petition which is denied may be appealed in writing to the Academic Policies Committee, whose ruling is final.

## **Transferring Units while Enrolled at the University**

After matriculation at PLNU, students who wish to augment their experience with coursework from another accredited institution must obtain written approval from the Office of Records prior to registering. In this process, coursework designed to meet PLNU requirements in the academic major requires additional approval of the respective department chair or school dean.

## **Academic Honors**

### **Dean's List**

Each semester the Office of the President recognizes honor students who have achieved a grade-point average of 3.500 or higher in at least 12 units of work during the previous semester. The Dean's List is posted on the university website.

## **Honors Scholars**

During the senior year, a student who has demonstrated exceptional scholarship and capacity for serious and creative study or research may propose to graduate as an honors scholar. With the guidance of a major professor, the student submits the results of an approved proposal to a committee and, if accepted and when the project is completed satisfactorily, earns the Honors Scholar classification.

## **Education Records (FERPA) and Directory Information**

The Family Educational Rights and Privacy Act (FERPA) of 1974 as amended affords students certain rights with respect to their education records. These include: 1) the right to inspect and review the student's education records within 45 days of the day the university receives a request for access, 2) the right to request the amendment of the student's education records that the student believes are inaccurate or misleading, 3) the right to consent to disclosures of personally identifiable information contained in the student's education records, and 4) the right to file a complaint with the U.S. Department of Education concerning alleged failures by Point Loma to comply with the requirements of FERPA.

FERPA has specifically identified certain information called directory information that may be disclosed without student consent. Although directory information may be disclosed without student consent, PLNU is not required to release directory information.

The university has defined directory information as name, address (including electronic mail), telephone number, date and place of birth, major field of study, dates of attendance, enrollment status, degrees, honors and awards received, participation in officially recognized activities and sports, weight and height of members of athletic teams, degree candidacy, and the most recent previous educational agency or institution attended. This information may be provided, upon review by the Vice Provost for Academic Administration, as public information or to individuals who demonstrate a valid need to contact students.

Periodically, PLNU conducts formal and informal photo and video shoots (around the campus and at off-campus events and activities) for use in university publications, social media, promotional videos/commercials, and the PLNU Web site. Students who require that no identifiable image be used by the university must notify Marketing and Creative Services in writing prior to the second Monday of each semester. Students should email their request to [photo-optout@pointloma.edu](mailto:photo-optout@pointloma.edu) and include their full name and student ID number. In addition, PLNU may submit information about students' participation in school activities to media outlets. Students who require that their names be excluded from such stories must notify Marketing and Creative Services in writing prior to the second Monday of each semester.

The university may disclose education records to college officials with legitimate educational interests. A college official is a person employed by the university; a member of the Board of Trustees; or an individual serving on a committee, such as disciplinary or grievance committees. A college official has a legitimate educational interest if the information aids the official in fulfilling professional functions. PLNU also includes among college officials a student appointed to an official committee or assisting another official in performing tasks and outside service providers who perform an institutional service of function such as attorneys, auditors, and the National Student Clearinghouse. The university may also disclose education records to post-secondary institutions in which a student is seeking or intending to enroll, or is already attending if the disclosure is for purposes related to the student's enrollment or transfer.

Questions relative to FERPA policies should be referred to the Office of the Vice Provost for Academic Administration or may be referenced at FERPA.

## **Leave of Absence**

Full-time students in good academic standing may apply for a one semester leave of absence from their program of study. The maximum leave of absence allowed is one academic term (Fall or Spring), not to exceed 180 days in any 12

month period and can only be granted once during a student's undergraduate academic experience. Students receiving financial aid will continue to be considered "in-school status" only for institutional aid. Students receiving federal or state financial aid may have those funds prorated and adjusted or returned under Title IV federal guidelines.

Students who wish to apply for a leave of absence form should obtain an application from Student Development. The application must be signed by the university officers called for on the form, a length of leave proposed, and the application returned as indicated. Any courses taken for credit during an approved leave of absence must have prior approval. Upon return, students with junior or senior classification must schedule an appointment for a graduation check in the Office of Records.

The completed leave of absence form is filed in the Office of Records. Failure to return following the approved leave of absence period initiates an administrative withdrawal from the university as of the initiating date of the leave of absence. This withdrawal may also have financial aid implications, such as the expiration of a loan's grace period and may cause a student loan to immediately be in repayment.

## **Global Studies Policy**

To maintain a high academic standard, Global Studies programs require a minimum cumulative GPA of 2.75 or higher. Students who are on academic or disciplinary probation are not eligible to participate in study abroad programs. Global Studies students will be limited to a maximum of 16 semester units in sessions of 15 weeks or more and to corresponding unit maximum ratios in sessions of other lengths. On a case by case basis as part of their Global Studies application process, students may seek approval to include one PLNU online class of 4 units or fewer within the 16 semester unit maximum. Effective Spring 2017.

Grades earned through OGS-designated affiliate or non-OGS programs are neutral and, as such, not included in PLNU GPA calculation. Grades earned through OGS-designated partner programs are included in PLNU GPA calculation (students should confirm affiliate and partner school designations with the Office of Global Studies).

## **Official Catalog**

As the on-line catalog is considered to be the official document relative to academic program offerings and charges, any print-outs of pages taken from the on-line version are, by definition, unofficial.

## **Transfer Information**

PLNU transfers college-level courses from regionally accredited institutions to count toward General Education, major, or elective credit.

- Remedial level or vocational coursework does not transfer
- Lower division courses do not transfer toward upper-division (300-400 level) requirements
- Transfer maximum of 70 junior college units in chronological order\*
- All graded transfer courses (A through F) calculate into the cumulative GPA
- Credit/Pass courses transfer for elective units and do not fulfill major or GE requirements
- Courses must be repeated at the same institution in order to replace a grade of C- or below

## **Credit from Other Sources**

Sources of Credit	Yes	No	Credit Requirement Accepted	Minimum/Maximum Credit	Comment
Advanced Placement Examinations (AP)	•		Score of 3, 4, or 5	32*	Credit only in applicable areas of the curriculum.
College-Level Examination Program (CLEP) General Examinations and Freshman Composition.		•			
College-Level Examination Program (CLEP) Subject Examinations	•			32*	Approved on a case-by-case basis. See Records Office.
International Baccalaureate (IB)	•		Score of 5 or higher	32*	Higher level only. Approved on a case-by case basis.
NLN - National League for Nursing Mobility Profile	•				Granted upon the recommendation of the School of Nursing.
Excelsior College Examinations #554 (Licensed Vocational Nurse)	•		Minimum of "B" or better	8 units	Granted only upon the recommendation of the School of Nursing.
Credit recommendations of the ACE Guide to the Evaluation of Educational Experience in the Armed Services, detailed on the Joint Services Transcript	•			32*	Approved on a case-by-case basis. See Records Office.
Military Discharge Document (DD214), active military identification card or ROTC	•				Waives PED 100 and physical activity requirement.
Units by non-traditional delivery systems	•			12*	Approved on a case-by-case basis. See Records Office.
Bible colleges not accredited by the Western Association of Schools and Colleges or a comparable regional accrediting association	•			12	Limited credit accepted, reviewed after student attends PLNU for a semester.
Non-U.S. college and university transcripts	•				Only upon receipt of transcript from approved foreign evaluation service.
Reserve Officer Training Corps (ROTC)	•				In cooperation with SDSU and USD.

Accredited community college transcripts	•			70*	See Records Office for transfer agreements.
Study Abroad	•				See Office of Global Studies for PRIOR approval.
Continuing Education units		•			
GED	•				In lieu of a high school transcript.
* <b>NOTE:</b> A combined maximum of 70 units may be transferred to PLNU from these sources. Only 32 combined units may be transferred from AP, CLEP, IB, ACE, and online coursework.					

## General Education

It is the goal of the university to provide an education in the liberal arts tradition and in professional areas, balancing a broadening experience in its general education program with the depth necessary to concentrate in one of the major programs.

The undergraduate curricula at Point Loma Nazarene University include a wide variety of programs. The university also encourages and assists students who wish to study abroad. Many programs feature internships and practicum experiences. Off-campus cooperative programs also offer students the benefits of spending a part of their educational experience in nearby locations or on the other side of the globe.

## General Education Learning Outcomes (GELO)

*Context #1: Learning, Informed by our Faith in Christ*

**ILO\* #1: Students will acquire knowledge of human cultures and the physical and natural world while developing skills and habits that foster life-long learning.**

GELO 1a. Written: Students will be able to effectively express ideas and information to others through written communication.

GELO 1b. Oral: Students will be able to effectively express ideas and information to others through oral communication.

GELO 1c. Information Literacy: Students will be able to access and cite information as well as evaluate the logic, validity, and relevance of information from a variety of sources.

GELO 1d. Critical Thinking: Students will be able to examine, critique, and synthesize information in order to arrive at reasoned conclusions.

GELO 1e. Quantitative Reasoning: Students will be able to solve problems that are quantitative in nature.

*Context #2: Growing, In a Christ-Centered Faith Community*

**ILO #2: Students will develop a deeper and more informed understanding of self and others as they negotiate complex environments.**

GELO 2a. Students will develop an understanding of self that fosters personal wellbeing.

GELO 2b. Students will understand and appreciate diverse forms of artistic expression.

GELO 2c. Students will demonstrate an understanding of the complex issues faced by diverse groups in global and/or cross-cultural contexts.

*Context #3: Serving, In a Context of Christian Faith*

**ILO #3: Students will serve locally and/or globally in vocational and social settings.**

GELO 3. Students will demonstrate an understanding of Christian Scripture, Tradition, and Ethics, including engagement in acts of devotion and works of mercy.

*\*ILO - Institutional Learning Objective*

## **General Education**

The purpose of general education is to provide a common educational experience, to develop essential skills, and to provide a broad cultural background for personal and professional growth. The general education curriculum is listed under a four-fold division. This structure provides continuity with the Wesleyan approach to knowledge by emphasizing the human response as foundational to the developing, exploring, and seeking aspects of education. The divisions, although not mutually exclusive or all-encompassing, organize similar themes relevant to faith and learning. Each complements the others and, in each, conscious efforts are made to reveal connections, develop perspectives, and build synthetic thinking skills. These divisions are: Responding to the Sacred, Developing Cognitive Skills, Exploring an Interdependent World, and Seeking Cultural Perspectives.

## **General Education Committee**

The general education program is approved and sustained by the faculty under the direction of a faculty committee. The General Education Committee directs an on-going cycle of review and improvement based on established goals and objectives.

## **General Education Prerequisites**

Students are required to demonstrate basic competence in mathematics and writing based on standardized test scores. *Any remedial courses, numbered below 100, taken to satisfy competency requirements, are in addition to the minimum of 128 units required for graduation.*

## **General Education Requirements**

The specific requirements in general education, as established by the faculty, represent a broad-based experience in skills and ideas. The following selection of courses is designed to guide the student toward a liberalizing educational experience in the arts and sciences while allowing for substantial choice in the development of that education.

### **I. First Year Experience**

First Year Experience

### **II. Responding to the Sacred**

A study of Scripture and Christian heritage as foundational in the pursuit of knowledge and the development of personal values.

Students transferring to the university for the first time with 48 or more units, none of which are in religion, take only five units in this category at Point Loma Nazarene University (three of which must be at the upper-division level).

### **A. Biblical Foundations [2 courses; 5 units]**

- BIB 101 - Old Testament History and Religion (GE) (2)
- BIB 102 - New Testament History and Religion (GE) (3)

### **B. The Christian Tradition [1 course; 3 units]**

- CHU 395 - The Christian Tradition (GE) (3) **OR**
- THE 306 - The Life of Holiness (GE) (3)

## **III. Developing Cognitive Abilities**

*A pursuit of personal awareness and skill development, focusing on the analytical, communication, and quantitative skills necessary for successful living in modern society.*

### **A. Personal Development [1 course; 3 units]**

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)
- *Required of all students who graduated from high school the year prior to enrollment at PLNU.*
- 
- All others take:
- PSY 103 - General Psychology (GE) (3)
- *Required of transfer students who do not fall within the high school graduation period listed above.*

### **B. Critical Thinking and Communication [2 courses; 5-7 units]**

*At least three (3) units of College Composition must be completed in the student's first two semesters as a part of the First Year Experience program.*

*All students must fulfill the composition requirement prior to the junior year.*

- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) (4)
- **OR**
- WRI 116 - College Composition: Research - First Year Experience (GE) (2) \*\*
- 
- COM 100 - Principles of Human Communication (GE) (3)
- **OR**
- COM 231 - Argumentation and Debate (GE) (3)

## Note(s):

*A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 097, along with WRI 110 or WRI 116.*

*\*\*WRI116 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

## C. Problem Solving [1 course; 3-4 units]

- MTH 144 - Calculus With Applications (GE) (4) **OR**
- MTH 164 - Calculus I (GE) (4) **OR**
- MTH 173 - Business Calculus (GE) (3) **OR**
- MTH 303 - Problem Solving (GE) (3)

## IV. Exploring an Interdependent World

An introduction to the natural and social sciences as tools for exploring the world, with emphasis on collecting and interpreting empirical data for both theoretical and practical purposes.

### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8 units]

#### Biological Science [1 course from this group]

- BIO 101 - Human Biology and Bioethics (GE) (3) **and**
- BIO 101L - Human Biology and Bioethics Laboratory (GE) (1)
- 
- BIO 102 - Environment and People (GE) (4)
- 
- BIO 103 - Introduction to Biology (GE) (3) **and**
- BIO 103L - Introduction to Biology Laboratory (GE) (1)
- 
- BIO 104 - Biotechnology and Society (GE) (4)
- 
- BIO 105 - Ecology and Conservation (GE) (3) **and**
- BIO 105L - Ecology and Conservation Laboratory (GE) (1)
- 
- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

#### Physical Science [1 course from this group]

- CHE 101 - Chemistry and Society (GE) (4)
- 
- CHE 102 - Chemistry in our Everyday Lives (GE) (3) **and**
- CHE 102L - Chemistry in Our Everyday Lives Lab (GE) (1)
- 
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4)
- **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- 
- CHE 152 - General Chemistry I (GE) (4)
- 
- PHY 113 - The Physics of Sound and Music (GE) (3) **and**
- PHY 113L - Physics of Sound and Music Lab (GE) (1)
- 
- PHY 141 - General Physics I (GE) (4)
- PHY 241 - University Physics I (GE) (4)
- PSC 105 - The Cosmos (GE) (4)
- PSC 111 - Physical Science for Teachers (GE) (4)

## **B. Physical Fitness and Nutrition [2 courses; 3-5 units]**

*One of the following courses is required:*

- PED 100 - Fitness Through Movement (GE) (2)
- PED 200 - Optimal Health (GE) (2)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- 
- *Any one (1) unit activity course numbered PED 102-PED 184 **OR** one of the following is required:*
- PED 220 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 225 - Individual and Dual Sports (GE) (2)

## **C. The Social World [1 course; 3-4 units]**

*One of the following in:*

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- 
- POL 101 - Introduction to Political Science (GE) (3)
- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)
- 
- SOC 101 - Introduction to Sociology (GE) (3)

- SOC 103 - Social Problems (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)

## **V. Seeking Cultural Perspectives**

*A survey of human endeavors from a historical, cultural, linguistic, and philosophical perspective, including developing critical appreciation of human expression—both artistic and literary.*

### **A. The History of World Civilizations [2 courses; 6 units]**

- HIS 110 - World Civilizations I (GE) (3)
- HIS 111 - World Civilizations II (GE) (3)

### **B. The Fine Arts [2 courses from distinct areas; 4-5 units]**

- ART 100 - Introduction to Art (GE) (2)
- ART 102 - Fundamentals of Art (GE) (3)
- ART 200 - History of Art I (GE) (3)
- ART 201 - History of Art II (GE) (3)
- 
- MUH 100 - Introduction to Music (GE) (2)
- MUH 101 - Introduction to Listening (GE) (2)
- 
- TRE 101 - Introduction to Theatre (GE) (2)

### **C. Philosophy [1 course; 3 units]**

- PHL 201 - Introduction to Philosophy (GE) (3)
- PHL 211 - Ethics (GE) (3)

#### **Note(s):**

B.S.N. candidates choose between two Literature options or one Literature and one Philosophy.

### **D. Literature [2 courses; 5 units]**

*Two courses; LIT200 and one upper division Literature course.*

#### **Lower Division:**

- LIT 200 - Literature and Culture (GE) (2)

#### **Upper Division:**

- LIT 350 - World Literature (GE) (3)
- LIT 351 - World Cinema (GE) (3)

- LIT 352 - Diverse Voices in American Literature (GE) (3)
- LIT 353 - Women Writers (GE) (3)

## **E. Foreign Language\* [2 courses; 8 units]**

*One of the following sequences in the same language, all or part of which may be waived by examination or by petition when English is not the student's native language:*

- CHN 101 - Elementary Chinese (Mandarin) I (GE) (4)
- CHN 102 - Elementary Chinese (Mandarin) II (GE) (4)
- 
- GER 101 - Elementary German I (GE) (4)
- GER 102 - Elementary German II (GE) (4)
- 
- GRK 207 - Biblical Greek I (GE) (4)
- GRK 208 - Biblical Greek II (GE) (4)
- 
- HEB 205 - Biblical Hebrew I (GE) (4)
- HEB 206 - Biblical Hebrew II (GE) (4)
- 
- FRE 101 - Elementary French I (GE) (4)
- FRE 102 - Elementary French II (GE) (4)
- 
- SPA 101 - Elementary Spanish I (GE) (4)
- SPA 102 - Elementary Spanish II (GE) (4)

### **\*Note(s):**

A foreign language is not required for B.S.N. candidates.

Students who believe they may qualify for a language waiver are advised to make application no later than spring of the sophomore year (or in the semester transfer to PLNU) to avoid possible delay in graduation.

## **Degree Program Information**

- Baccalaureate Degree Information

## **Majors, Minors and Certificates**

**The Major.** Point Loma Nazarene University offers five baccalaureate degrees: the Bachelor of Arts (B.A.), the Bachelor of Science in Business Administration (B.S. Bus. Admin), the Bachelor of Music (B.Mus.), the Bachelor of Science (B.S.), and the Bachelor of Science in Nursing (B.S.N.). Many of the 50+ major programs also offer in-depth concentrations. If a second major area of study is desired, all requirements for both majors must be met with a

minimum of 24 units distinguishing the two areas of study. While working on a single baccalaureate degree, the maximum number of pursuits is two majors and two minors. Students should review the majors and minors list in the catalog.

Freshman students transferring in 56 credits or fewer must complete all requirements for the degree within 7 years of initial matriculation. Students transferring in 57 credits or more must complete all requirements for the degree within 4 years of initial matriculation.

**The Minor.** Optional minors are offered in several schools and departments. The requirements governing minors are as follows:

- Only minors that appear in the student's catalog of record may be earned at the point of graduation;
- A minor is at least 16 units and is under the direct auspices of the respective school/department;
- Students must earn a 2.000 cumulative GPA in the minor for it to be granted;
- The minor must show a minimum of nine (9) units in residence;
- Of the 16+ units in the minor, nine (9) must be distinct from and not counted in the major or general education;
- Of the 16+ units in the minor, 12 must be at the upper-division level;
- The pass/no credit option is not available for courses within the minor; and
- A second minor, when feasible, requires a minimum of nine (9) units distinct from and not counted either in the major or in the first minor.

**The Certificate.** Optional certificates are offered in some schools or departments. The requirements governing certificates are as follows:

- A certificate is a skill or theme-based program using approved PLNU courses that supplements a student's undergraduate studies.
- Only certificates that appear in the student's catalog of record may be earned at the point of graduation.
- Students must earn a 2.000 cumulative GPA in the certificate for it to be granted.
- A certificate should be between 6-15 units if it is aligned with a major but may be up to 24 units if it is not aligned with a major.
- 50% or more of the units being applied to the certificate must be unique to that certificate.
- Of the total units in the certificate, a minimum of 2/3 must be earned in residence.

## Major

### Accounting, B.S. Business Administration

#### Program Learning Outcomes

Students who complete the program in Accounting will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate in-depth knowledge of accounting and federal tax regulations.
7. Apply accounting knowledge in the preparation and evaluation of financial statements.
8. Apply knowledge in federal tax regulations to evaluate tax positions and planning opportunities.

## Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
  
- MTH 153 - Mathematical Analysis for Business and Economics (3) *Or*
- MTH 173 - Business Calculus (GE) (3)
  
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Lower Division Units: 28

## Upper Division Requirements

- ACC 370 - Intermediate Accounting I (3)
- ACC 371 - Intermediate Accounting II (3)
- ACC 375 - Managerial Cost Accounting (3)
- ACC 410 - Federal Tax Accounting I (3)
- ACC 411 - Federal Tax Accounting II (3)
- ACC 421 - Advanced Accounting (3)
- ACC 425 - Financial Statement Analysis and Valuation (3)
- ACC 460 - Auditing (3)
- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required (3)**  
Accounting majors may substitute ACC 489 Internship in Accounting for BUS 489 Internship in Business in the core (3 total units required).
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Total: 42 Units

Major Total: 70 Units

## Recommended

- Cross-cultural experience
- MTH 173 - Business Calculus (GE) (3)
- ACC 350 - Ethics in Accounting (3)
- PHL 211 - Ethics (GE) (3)

## Note(s):

- ECO101 or ECO102 fulfills general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills general education Philosophy Requirement.

## Lower Division Requirements

### **Applied Health Science, B.S.**

## Program Learning Outcomes

*Students who complete the program in Applied Health Science will be able to:*

1. Demonstrate cognitive and psychomotor competence in the assessment of structure and function of the body including typical, anomalous, and pathological states.
2. Write technically in the context of the review and synthesis of professional literature.
3. Communicate orally to a target audience in topics of medicine and exercise science.
4. Conceptualize, exhibit, and teach from art they create, reflecting the structure and function of the human body and/or the implements manipulated by or acting upon the body.
5. Demonstrate ethical behavior, whether undergraduate students or alumni through volunteer or professional settings, and treat others as they wish to be treated as per the example of Jesus Christ.
6. Demonstrate preparation to articulate their post-graduate educational and career callings in light of their life purposes.

## Lower-Division Requirements

- KIN 101 - Orientation to Kinesiology **(1)**
- KIN 280 - Introduction to Athletic Training **(2)**
- BIO 130 - Human Anatomy and Physiology I (GE) **(4)**
- BIO 140 - Human Anatomy and Physiology II **(4)**
- BIO 210 - Cell Biology and Biochemistry (GE) **(4)**
- BIO 220 - Microbiology of Infectious Diseases **(4)**
- CHE 152 - General Chemistry I (GE) **(4)**
- CHE 153 - General Chemistry II **(4)**
- PSY 103 - General Psychology (GE) **(3)**
- PED 200 - Optimal Health (GE) **(2)**
- *Certification in First Aid and CPR*

Total: 32 Units

## Upper-Division Requirements

- ATR 385 - Pathology of Injury and Illness **(3)**
- KIN 312 - Motor Learning and Motor Development **(3)**
- KIN 325 - Structural Kinesiology **(2)**
- KIN 327 - Applied Biomechanics **(2)**

- KIN 340 - Physiology of Exercise (3)
- PSY 321 - Abnormal Psychology (3)
- KIN 440 - Measurement, Statistics, and Evaluation of Human Performance (3) **OR**
- MTH 203 - Introduction to Statistics (3) \*

*\* Students are required to complete a minimum of 24 upper-division units in the major. If the lower division MTH203 option is chosen, at least 8 units from the electives sections below must be upper-division (300-400 level).*

Two additional upper-division electives in the Department of Kinesiology:

- ATR 387 - Assessment of Lower Extremity Pathology (3)
- ATR 388 - Assessment of Head, Spinal, and Upper Extremity Pathology (3)
- ATR 410 - Therapeutic Exercise (3)
- ATR 415 - Therapeutic Modalities and Pharmacology (3)
- KIN 430 - Clinical Exercise Physiology (3)
- KIN 475 - Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3)
- KIN 488 - Internship in Kinesiology (1-3) **3 Units Required**

Take a minimum of (7) units of electives from the following:

Take a minimum of (7) units of electives from the following:

- ATR 415 - Therapeutic Modalities and Pharmacology (3)
- ATR 420 - Pharmacology (1)
- BIO 345 - Genetics (4)
- BIO 470 - Neuroscience (3)
- CHE 294 - Organic Chemistry I (4)
- EXS 330 - Nutrition for Exercise and Sport Performance (3)
- EXS 350 - Fitness Assessment and Exercise Prescription (3)
- EXS 370 - Praxis of Strength Training and Conditioning (3)
- FCS 150 - Human Development (3)
- MTH 203 - Introduction to Statistics (3)
- PHY 141 - General Physics I (GE) (4)
- PHY 142 - General Physics II (GE) (4)
- PSY 308 - Developmental Psychology – Birth Through Adolescence (4)

Recommended Course

- KIN 340L - Physiology of Exercise Lab (1)

Total: 26-35 Units

Total Units for Applied Health Science

**Total units for applied health science: 66-67**

# Art Education, B.A.

## Program Learning Outcomes

**Students who complete the program in Art Education with concentrations in Visual Arts and Graphic Design will be able to:**

1. Produce original, contemporary works of art (visual art or graphic design) using the art elements and design principles, demonstrating current skills and techniques in selected art media and technologies.
2. Write and speak about artists and visual art forms from the history of Western and Non-Western art.
3. Use the elements of art and principles of design to analyze their own artwork.
4. Formulate sequential art curriculum units for use in 7-12 school art programs, using the *California Visual and Performing Arts Art Standards*.
5. Articulate their own philosophy of art education for K-12 grade levels.

## Required Concentrations

**Choose a Concentration from the following:**

Group A – Visual Arts Concentration

Group B – Graphic Design Concentration

## Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
  
- ART 203 - Graphic Design I: Visual Symbolism (3) **OR**
- ART 206 - Experimental Drawing Studio (3)
  
- ART 210 - Painting: Color and Technique (3)
- ART 202 - Introduction to Computer Graphics (3)
- FCS 150 - Human Development (3)
- One college course in ceramics (3)

Total: 30 Units

## Upper-Division Requirements

- ART 319 - Visual Arts in the Classroom I (3) *OR*
- ART 455 - Visual Arts in the Classroom II (3) (ART 455 recommended)
  
- ART 325 - Non-Western Art History (3)
- EDU 302 - Foundations of Education and Learning Theory (3)

Choose one Art History course (3 units):

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)

Total: 12 Units

## Concentrations

### Group A – Visual Arts Concentration

Choose one two-course sequence (6 units):

- ART 221 - Photography: Darkroom and Film (3)
- ART 321 - Photography: Alternative Processes (3)  
*OR*
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 322 - Sculpture: Objects and Installation (3)  
**OR**
- ART 223 - Printmaking I (3)
- ART 323 - Printmaking II (3)  
*OR*
- ART 310 - Painting II (3)  
**AND**
- ART 330 - Illustration I (3) **OR**
- ART 345 - Life Drawing (3)

Total: 6 Units

Capstone courses (9 units):

- ART 390 - Advanced Studio Practice (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 472 - Exhibition or Research Preparation (3)

Total: 9 Units

Total: 15 Units

### Group B – Graphic Design Concentration

Two-course sequence (6 units):

- ART 303 - Graphic Design II: Typography (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3)

Capstone courses (7-9 units):

- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 471 - Graphic Design Portfolio Review (3)
- ART 470 - Internship (1-3)

Total: 13-15 Units

Note(s):

\*Meets the general education requirement in the Fine Arts.

## **Athletic Training, B.A.**

### Program Learning Outcomes

*Students who complete the program in Athletic Training will be able to:*

1. Demonstrate cognitive and psychomotor competence in the 12 content areas of the Athletic Training Educational Competencies.
2. Exhibit advancing clinical proficiency in the practice of athletic training through (1) development in knowledge, psychomotor skills, and clinical reasoning and (2) application of evidence-based decision making.
3. Speak and write coherently on information in athletic training, and communicate it effectively to a target audience.
4. Demonstrate the common values and behaviors of the athletic training profession in a distinctly moral and ethical manner, integrating the Christian faith with clinical practice.
5. Demonstrate preparation to serve a diverse environment through experience with a variety of patient populations and clinical settings and with various allied healthcare professionals.
6. Demonstrate knowledge and skills required of an entry-level Certified Athletic Trainer.
7. Demonstrate preparation for careers that utilize Certified Athletic Trainers or for graduate study and employment in allied healthcare professions.

### Lower-Division Requirements

- ATR 102 - Risk Management and Emergency Response (1)
- ATR 102L - Risk Management and Emergency Response Laboratory (1)
- ATR 290 - Clinical Internship I (3)
- ATR 291 - Clinical Internship II (3)
- KIN 101 - Orientation to Kinesiology (1)
- KIN 280 - Introduction to Athletic Training (2)
- KIN 280L - Introduction to Athletic Training Lab (1)
- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 140 - Human Anatomy and Physiology II (4)
  
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **OR**
- CHE 152 - General Chemistry I (GE) (4)

Total: 24-25 Units

## Upper-Division Requirements

- ATR 385 - Pathology of Injury and Illness (3)
- ATR 387 - Assessment of Lower Extremity Pathology (3)
- ATR 388 - Assessment of Head, Spinal, and Upper Extremity Pathology (3)
- ATR 390 - Clinical Practicum I (3)
- ATR 391 - Clinical Practicum II (3)
- ATR 410 - Therapeutic Exercise (3)
- ATR 415 - Therapeutic Modalities and Pharmacology (3)
- ATR 420 - Pharmacology (1)
- ATR 460 - Management of Allied Health Care (3)
- ATR 493 - Clinical Preceptorship I (2)
- ATR 494 - Clinical Preceptorship II (1)
- KIN 312 - Motor Learning and Motor Development (3)
- KIN 325 - Structural Kinesiology (2)
- KIN 327 - Applied Biomechanics (2)
- KIN 340 - Physiology of Exercise (3)
  
- KIN 440 - Measurement, Statistics, and Evaluation of Human Performance (3) **OR**
- MTH 203 - Introduction to Statistics (3)

Total: 41 Units

## Recommended Courses

- PED 200 - Optimal Health (GE) (2)
- EXS 370 - Praxis of Strength Training and Conditioning (3)
- KIN 340L - Physiology of Exercise Lab (1)

## Accreditation of the Athletic Training Program

The ATP is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).

## Admission to the Athletic Training Program (ATP)

Students must apply for admission to the major. Space in the sophomore, junior and senior level courses is limited, and admission to the Athletic Training major is competitive. Selections for participation in the ATP are made during the spring for the following fall semester.

## Program Fees

## Cost of Immunizations

Students are responsible for the costs of their own immunizations, the currency of which must be documented and placed on file in the Program Director's office.

## **Costs of Transportation**

The student is responsible for transportation and the costs associated with that transportation to clinical affiliate sites which are utilized in the clinical courses. Students are encouraged to ride share and/or cost share.

## **Required Clinical Clothing**

Some required clinical clothing is provided for the ATS. In the spring semester decisions are made regarding the clothing required for the following fall semester. Students are notified as to the clothing that will be required, provided to them, and the optional clothing they may purchase. The Head Athletic Trainer is the administrator responsible for the required clinical clothing. The Head Athletic Trainer serves on the institutional logo committee and consults her colleagues and students regarding style, size, required and optional clothing.

## **Maintenance of CPR certification**

Maintain CPR certification. All students taking ATR 102 in their freshman year will receive their CPR and AED certification card at the end of the respective semester. Students will be responsible for maintaining the CPR and AED certification while in the program. The cost of the course will be the responsibility of the student. Current course fees range from \$50-\$75 depending on where the student decides to take the recertification course.

## **Eligibility**

Students are eligible to be considered for the Point Loma Nazarene University ATP when the following criteria are met:

- Submit an ATP Application for Admission\* by February 15.
- Submit three letters of recommendation on the ATP form.\*
- Complete all competencies required in KIN 280 - Introduction to Athletic Training and the companion laboratory KIN 280L and achieve a grade of B- or better.
- Complete all competencies in ATR 102 Risk Management and Emergency Response and ATR 102L Risk Management and Emergency Response Lab and achieve a grade of B- or better.
- Completion of 36 hours of observation in the PLNU Athletic Training Clinic verified by a PLNU ATC. Transfer students may do their observation in another Athletic Training setting, with hours verified by an ATC who must have their signature notarized.
- Have a minimum grade point-average of 2.500\*\*.
- Submit a PLNU physical examination form\*, see under Health Status below.
- Meet and certify understanding of the Technical Standards for Admission to the ATP.
- Agree to and sign the PLNU Mission Statement Code of Conduct
- Submit immunization record\*.
- Complete an interview with the ATP Admissions Committee.

\* Available on the PLNU ATP Web site

\*\* Probationary admission status may be considered under special circumstances.

## **Selection**

The ATP Admissions Committee, comprised of ATP faculty members and one student from each of the three student cohorts, rate each applicant on the following: quality of application, letters of recommendation, interview, clinical observation experience, grades in required courses, cumulative GPA, and completion of Technical Standards assessment and Code of Conduct endorsement.

Students are selected for admission to the ATP in March and begin the program in August of the following academic year. These students are deemed the cohort of the year they are projected to graduate.

## Health Status

Submit a PLNU physical examination form completed by a physician or physician assistant stipulating the candidate is physically able to meet the technical standards and perform the duties of an Athletic Training student.

Students must have current immunizations prior to beginning their sophomore clinical courses. Immunization reporting form is available on the ATP Website.

## Probationary Admission Status

Should an applicant not meet the required prerequisite course grades or cumulative GPA requirement, he/she may apply to the program and be considered for a probationary admission status if all other admission criteria are met. A student admitted to the ATP on probationary status must meet the requirements for retention in the ATP as outlined below, or that student is not permitted to continue in the program.

## Retention

All students admitted to the ATP must maintain the following minimum standards to remain in good standing in the program:

- Maintain a 2.500 cumulative GPA.
- Adhere to and exhibit high levels of performance on the Technical Standards and enthusiastically adhere to and promote the Mission of the PLNU ATP.
- Earn a grade of C or better in the following courses: ATR 290, ATR 291, ATR 385, ATR 387, ATR 388, ATR 390, ATR 391, ATR 410, ATR 415, ATR 460, ATR 493, ATR 494.

## Program Provisions

- Students are required to commute to off-campus internships via their own transportation arrangements.
- Students are required to wear clothing that identifies them as an athletic training student from PLNU. Most items are provided to students by the ATP.
- To complete the ATP course of study requires a minimum of three academic years.

## Transfer Student Policy

Transfer students may apply and gain admission to the ATP under the following provisions, which should be met prior to application to the program:

- After admission to the university and the ATP, completion of the degree in Athletic Training requires a minimum of six semesters (typically three years) regardless of student classification and number of semester units completed.

- All applicants are required to complete 36 hours of directed observation and all prerequisite courses (ATR 102 - Risk Management and Emergency Response, ATR 102L Risk Management and Emergency Response Lab, KIN 280 - Introduction to Athletic Training, and KIN 280L - Introduction to Athletic Training Lab or their equivalents) prior to application.
- All prerequisite course work required for admission to the ATP completed at another institution prior to matriculation to PLNU must be judged to be equivalent to PLNU courses. The student must demonstrate attainment of educational competencies required in those three courses by submitting the following to the ATP director prior to applying: 1) official transcript(s) and course descriptions of all prerequisite courses with grades of B- or higher, 2) a university catalog copy showing prerequisite course descriptions, and 3) a course syllabus or contact information for the faculty who taught each of the courses.

Any Certified Athletic Trainer (ATC) may verify the 36 hours of required observation in an Athletic Training setting. If the verifying AT is not an employee of PLNU, a notary public must authenticate the signature. The log of hours and the AT verification of those hours must be presented with the ATP application on the form found on the ATP Website.

## Admission for Student-Athletes

Student-athletes may apply and be admitted to the ATP under the following provisions, which are stipulated to the individuals prior to application to the program via academic advisement:

- The quality and quantity of time, effort and proficiency of clinical education in the Athletic Training program cannot be compromised for any reason.
- The didactic courses and lab experiences are scheduled in such a way that conflict with practice and game assignments for an athlete are minimal. However, afternoon and evening athletic activities and Athletic Training schedules often conflict. The student must make provision for being available for assigned clinical assignments an academic priority.
- If conflict with the clinical courses cannot be resolved prior to the beginning of a semester, the student-athlete may opt for completion of that clinical experience at a later time with a different cohort of students and will be expected to demonstrate all clinical proficiencies and learning over time.
- Should the student-athlete opt for completion of a given clinical experience at a later time, the completion of the major may require additional semesters or enrollment in summer sessions for completion beyond the six semester minimum.

## Non-Discrimination Policy

The PLNU Athletic Training Program does not discriminate on the basis of gender, race, color, national or ethnic origin in any aspect of the administration of its educational program.

## Communicable Disease Policy

The communicable disease policy is designed to provide methods for reducing the transmission of infectious diseases from athletic training personnel (ATC, ATS) to patients and from patients to athletic training personnel. Prevention of transmission of such diseases includes immunizations for vaccine preventable diseases, isolation precautions to prevent exposures to infectious agents, and management of athletic training personnel exposure to infected persons. The objectives of this policy include the following: (1) education athletic training personnel about the principles of infection control and stressing individual responsibility for infection control (2) collaboration with other departments to help ensure adequate surveillance of infections in personnel and provision of prevention services (3) providing care to athletic training personnel for work-related illnesses or exposures, and (4) identifying work-related infection risks and instituting appropriate preventative measures. This policy will follow the guidelines set by the Centers for Disease Control and Prevention in the "SPECIAL ARTICLE, Guideline for infection control in health care personnel, 1998". (Published in *AJIC: American Journal of Infection control* (1998; 26:289-354)).

Athletic training personnel are encouraged to report any infectious disease/problem condition to their direct supervisor. Athletic training personnel are restricted from patient contact, or contact with the patient's environment if they have an infectious communicable disease. Athletic training students would report to their ACI and the program director. Certified athletic trainers would report to the Director of Rehabilitation Services. Personnel who have been acutely exposed to a potential infection disease would follow the Biohazard Exposure Control Plan. In the case that athletic training personnel refuse or are unwilling to report their condition to their supervisor for some reason, they must make sure they are restricting themselves from patient contact, or contact with the patient's environment.

Athletic training personnel known to be infected with a communicable disease can be excluded from duty. The type and duration of work restrictions will be dependent upon the type of disease/problem, by the mode of transmission and the epidemiology of the disease. The ATEP Program Director, Director of Rehabilitation Services, and/or treating Physician, will determine the duration and type of work or clinical restriction imposed for athletic training students. The Director of Rehabilitation Services and/or treating Physician, will determine the duration and type of work or clinical restriction imposed for certified athletic trainers.

When an ATS is sick, the following guidelines are to be followed:

ATS's will not report for duty if their illness:

- Results in a fever over 101°
- Will be exacerbated by being in the clinic and physically active
- Jeopardizes the health of clinical staff and clients

## National Certification

Upon completion of the baccalaureate degree in Athletic Training, students are eligible to apply for and take the NATA Board of Certification examination. Athletic Training Students who pass the national examination become Certified Athletic Trainers.

## Biology, B.A.

### Program Learning Outcomes

**Students who complete the B.A. program in Biology will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2. Participate in the life of the Biology Department by involvement in one or more of the following areas: research, biology clubs, and/or various positions of responsibility serving as graders, tutors, and/or teaching assistants.
3. Develop a rationally defensible integration of science and faith.
4. Be prepared for post-graduate studies or science-related careers.

### Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) (4) \*\*
- BIO 211 - Ecological and Evolutionary Systems (GE) (4) \*\*
- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4) \*\*

- CHE 153 - General Chemistry II (4)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4) \*\*

Total: 27-28 Units

Note(s):

*\*Course can be waived.*

### Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 352 - Research Methodology (2)
- BIO 363 - Conservation Ecology (3)
- BIO 380 - Molecular Biology (3)
- BIO 497 - Biology Seminar (1)
- MTH 363 - Calculus Based Statistics With R (3)

Upper Division Total: 16 Units

Take a minimum of 12 units of electives from the following options:

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 350 - Advanced Cell Biology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 450 - Advanced Biochemistry (4)
- BIO 470 - Neuroscience (3)
- BIO 473 - Experimental Marine Ecology (3)
- BIO 490 - Internship in Biology (1-3)

Upper Division Elective Total: 12 Units

Bachelor of Arts Total: 55-56 Units\*\*

\*\* 12 units meet general education requirements

## Biology, B.S.

### Program Learning Outcomes

Students who complete the B.S. program in Biology will be able to:

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2. Participate in the life of the Biology Department by involvement in one or more of the following areas: research, biology clubs, and/or various positions of responsibility serving as graders, tutors, and/or teaching assistants.
3. Develop a rationally defensible integration of science and faith.
4. Be prepared for post-graduate studies or science-related careers.

### Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) (4) \*\*
- BIO 211 - Ecological and Evolutionary Systems (GE) (4) \*\*
- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4) \*\*
- CHE 153 - General Chemistry II (4)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4) \*\*
- PHY 141 - General Physics I (GE) (4) \*\*
- PHY 142 - General Physics II (GE) (4)

Total: 35-36 Units

Note(s):

*\*Course can be waived.*

### Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 352 - Research Methodology (2)
- BIO 363 - Conservation Ecology (3)
- BIO 380 - Molecular Biology (3)
- BIO 497 - Biology Seminar (1)
- MTH 363 - Calculus Based Statistics With R (3)

Upper Division Total: 16 Units

Take a minimum of 14 units of electives from the following options:

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 350 - Advanced Cell Biology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 450 - Advanced Biochemistry (4)
- BIO 470 - Neuroscience (3)
- BIO 473 - Experimental Marine Ecology (3)
  
- BIO 490 - Internship in Biology (1-3)  
OR
- BIO 499 - Research in Biology (1-3)
  
- **Approved Off-Campus (1-4)**

Upper Division Elective Total: 14 Units

Bachelor of Science Total: 65-66 Units \*\*

\*\* 12 units meet general education requirements.

## **Biology-Chemistry, B.S. (Biology)**

The interdepartmental major in Biology-Chemistry is designed for students whose academic needs and interests include both biology and chemistry. A large segment of contemporary scientific investigation lies at the intersection of these two fields. Areas open to students by this preparation include medicine, dentistry, and graduate disciplines such as biochemistry, physiology, and molecular biology.

### **Program Learning Outcomes**

**Students who complete the program in Biology-Chemistry will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations.
4. Participate in the life of the Biology and/or Chemistry Department by involvement in one or more of the following areas: research, biology and/or chemistry clubs, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
5. Develop a rationally defensible integration of science and faith.

6. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4)

Choose one sequence: 8 Units

- PHY 141 - General Physics I (GE) (4) **AND**
- PHY 142 - General Physics II (GE) (4)
- OR**
- PHY 241 - University Physics I (GE) (4) **AND**
- PHY 242 - University Physics II (4)

Total: 38-39 Units

Note(s):

*\*Course can be waived*

## Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 380 - Molecular Biology (3)
- BIO 497 - Biology Seminar (1)
- CHE 304 - Organic Chemistry II (4)
- CHE 325 - Physical Chemistry I (4)
- CHE 466 - Bioinorganic Chemistry (2)
  
- BIO 450 - Advanced Biochemistry (4) **OR**
- CHE 450 - Advanced Biochemistry (4)

One course from:

- CHE 326 - Physical Chemistry II (3)
- CHE 351 - Organic Structure Elucidation (2)
- CHE 370 - Instrumental Analysis (2)
- CHE 453 - Advanced Organic Chemistry (2)

- CHE 468 - Advanced Inorganic Chemistry (3)

At least five units from:

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 350 - Advanced Cell Biology (3)
- BIO 352 - Research Methodology (2)
- BIO 363 - Conservation Ecology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 470 - Neuroscience (3)
- BIO 473 - Experimental Marine Ecology (3)

Total: 29-31 Units

Bachelor of Science Total: 67-70 Units

## **Biology-Chemistry, B.S. (Chemistry)**

The interdepartmental major in Biology-Chemistry is designed for students whose academic needs and interests include both biology and chemistry. A large segment of contemporary scientific investigation lies at the intersection of these two fields. Areas open to students by this preparation include medicine, dentistry, and graduate disciplines such as biochemistry, physiology, and molecular biology.

### **Program Learning Outcomes**

**Students who complete the program in Biology-Chemistry will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations.
4. Participate in the life of the Biology and/or Chemistry Department by involvement in one or more of the following areas: research, biology and/or chemistry clubs, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
5. Develop a rationally defensible integration of science and faith.
6. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4)

Choose one sequence: 8 Units

- PHY 141 - General Physics I (GE) (4) **AND**
- PHY 142 - General Physics II (GE) (4)
- **OR**
- PHY 241 - University Physics I (GE) (4) **AND**
- PHY 242 - University Physics II (4)

Total: 38-39 Units

Note(s):

*\*Course can be waived*

## Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 380 - Molecular Biology (3)
- BIO 497 - Biology Seminar (1)
- CHE 304 - Organic Chemistry II (4)
- CHE 325 - Physical Chemistry I (4)
- CHE 466 - Bioinorganic Chemistry (2)
  
- BIO 450 - Advanced Biochemistry (4) **OR**
- CHE 450 - Advanced Biochemistry (4)

One course from:

- CHE 326 - Physical Chemistry II (3)
- CHE 351 - Organic Structure Elucidation (2)
- CHE 370 - Instrumental Analysis (2)
- CHE 453 - Advanced Organic Chemistry (2)
- CHE 468 - Advanced Inorganic Chemistry (3)

At least five units from:

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 350 - Advanced Cell Biology (3)
- BIO 352 - Research Methodology (2)
- BIO 363 - Conservation Ecology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 470 - Neuroscience (3)
- BIO 473 - Experimental Marine Ecology (3)

Total: 29-31 Units

Bachelor of Science Total: 67-70 Units

## **Business Administration, B.A.**

### Program Learning Outcomes

Students who complete the program in Business Administration will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.

### Lower-Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)
- BUS 100 - Introduction to Business (3)
- BUS 201 - Legal Environment of Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- MTH 153 - Mathematical Analysis for Business and Economics (3) **Or**
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)
- MGT 212 - Principles of Management (3)

Total: 28 Units

### Upper-Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 Units required**
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

### Upper-Division Electives

- Choose 3 units of upper-division elective in Accounting, Business, Finance, Management, or Marketing other than any upper division requirements listed above. (ACC/BUS/FIN/MGT/MKT 300-490) (3)
- Choose an additional 3 units of upper-division elective specifically from the Economics group (ECO300-490) (3)

Total: 24 Units

Major Total: 52 Units

### Recommended

- Cross-cultural experience
- PHL 211 - Ethics (GE) (3)

### Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## **Chemistry, B.S.**

### Program Learning Outcomes

**Students who complete the program in Chemistry will be able to:**

1. Apply key concepts and principles in analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry.
2. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations and analyses.

3. Participate in the life of the Chemistry Department by involvement in one or more of the following areas: research, chemistry club, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
4. Be prepared for post graduate studies or a science-related career.

## Lower-Division Requirements

- CHE 151 - General Chemistry Tutorial **(1)** \*
- CHE 152 - General Chemistry I (GE) **(4)**
- CHE 153 - General Chemistry II **(4)**
- CHE 213 - Analytical Chemistry **(3)**
- CHE 294 - Organic Chemistry I **(4)**
  
- MTH 144 - Calculus With Applications (GE) **(4)**  
**OR**
- MTH 164 - Calculus I (GE) **(4)**
  
- MTH 174 - Calculus II **(4)**
- PHY 241 - University Physics I (GE) **(4)**
- PHY 242 - University Physics II **(4)**

Total: 31-32 Units

Note(s):

*\*Course can be waived*

## Upper-Division Requirements

- CHE 304 - Organic Chemistry II **(4)**
- CHE 325 - Physical Chemistry I **(4)**
- CHE 326 - Physical Chemistry II **(3)**
- CHE 327 - Physical Chemistry II Laboratory **(1)**
- CHE 351 - Organic Structure Elucidation **(2)**
- CHE 370 - Instrumental Analysis **(2)**
- CHE 450 - Advanced Biochemistry **(4)**
- CHE 453 - Advanced Organic Chemistry **(2)**
- CHE 454 - Advanced Organic Chemistry Laboratory **(1)**
- CHE 466 - Bioinorganic Chemistry **(2)**
- CHE 467 - Advanced Inorganic Chemistry Laboratory **(1)**
- CHE 468 - Advanced Inorganic Chemistry **(3)**
- CHE 495 - Chemistry Seminar **(1)**
- *Science and/or Math electives beyond those required for the degree must be approved by the department chair (Biology and Physics 300 level or higher, Math 200 level or higher). **(4)***

Total: 34 Units

## Recommended

- CHE 499 - Research in Chemistry (1-2)
- MTH 233 - Linear Algebra (3)
- MTH 274 - Calculus III (4)

Bachelor of Science Total: 65-66 Units

## **Child and Adolescent Development, B.A.**

### Program Learning Outcomes

**Students who complete the program in Child and Adolescent Development will be able to:**

1. Identify and describe normative similarities and differences of cognitive, emotional, social and physical theories at each developmental stage from prenatal through adulthood.
2. Illustrate how children's play facilitates integration of cognitive, social, physical, and emotional development.
3. Evaluate the effects of family systems on the development of children and adolescents.
4. Identify and discuss scientific research in understanding different philosophical views of growth and development, both historical and current.
5. Analyze what are developmentally appropriate concepts, activities, materials, and resources as related to infant through adolescent development.
6. Assess research of theoretical and appropriate practical elements of parenting to facilitate decisions for a healthy environment for children and adolescents.
7. Describe the adult-child dynamics and processes essential for building strengths of character and competence in children and adolescents.
8. Examine hereditary, cultural, and environmental factors inherent in ways children and adolescents develop physically, cognitively, morally, socially, and emotionally.
9. Evaluate the effects of society and culture upon the family microsystems, family types, and the subsequent macro systems with which they co-exist.
10. Identify career paths within the child and adolescent professions.

### Lower-Division Requirements

- FCS 101 - Introduction to Family and Consumer Sciences (1)
- FCS 120 - Child and Adolescent Development (4)
- FCS 150 - Human Development (3)
- FCS 203 - Infant and Toddler Development (3)
- FCS 230 - Personal and Consumer Financial Management (2)

Total: 13 Units

### Upper-Division Requirements

- FCS 305 - Life Cycle Nutrition (4)
- FCS 313 - Adolescent Development in the Family Context (2)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- FCS 355 - Development of Special Needs Children (3)

- FCS 385 - Family and Parenting (2)
- FCS 420 - Child Development in the Family and Community (4)
- FCS 425 - Child and Adolescent Nutrition (3)
- FCS 497 - Family and Consumer Sciences Senior Seminar (2)
- LIT 325 - Children's Literature (3)
- PSY 321 - Abnormal Psychology (3)

Select 12 upper-division units from:

- FCS 310 - Early Childhood Education (4)
- FCS 460 - Administration and Supervision in Early Childhood Education (4)
- FCS 470 - Practicum in Child Development (3)
- FCS 475 - Internship in Child Development (2 or 4)
- ART 319 - Visual Arts in the Classroom I (3)
- EDU 302 - Foundations of Education and Learning Theory (3)
- EDU 306 - Principles of Language Acquisition (3)
- MUE 341 - Music Skills for the Elementary Classroom Teacher (3)
- PED 308 - Methods of Teaching Physical Education (3)
- PSY 308 - Developmental Psychology – Birth Through Adolescence (4)
- PSY 325 - Clinical and Community Interventions (4)
- SOC 360 - Race and Ethnicity (3)
- SWK 340 - Child Welfare (3)

Total: 41 Units

Major Total: 54 Units

Note(s):

**Students must be fingerprinted through community care licensing to obtain Child Abuse Central Index Clearance.**

**Students graduating with a Child Development major may qualify for the “Child and Adolescent Development Site Supervisor” permit with the California Commission on Teacher Credentialing.**

## **Christian Studies, B.A.**

### Program Learning Outcomes

**Students who complete the program in Christian Studies Majors will be able to:**

- Interpret scripture evidencing biblical literacy.
- Articulate clear theological doctrines relevant to Christian life and ministry.
- Engage the perennial questions of the human condition using resources from philosophy.
- Apply principles of Christian formation for the practice of ministry.

### Concentrations

- General Concentration
- Biblical Studies Concentration
- Leadership Concentration
- Philosophy Concentration
- Theology Concentration
- Youth and Family Concentration

## Christian Studies Core Course Requirements

- BIB 101 - Old Testament History and Religion (GE) (2)
- BIB 102 - New Testament History and Religion (GE) (3)
- BIB 240 - Reading Scripture Faithfully (3)
- CMI 155 - Christian Formation and Ministry (3)
- PHL 250 - God and Philosophy (3)
- THE 250 - Introduction to Christian Theology (3)
- PHL 201 - Introduction to Philosophy (GE) (3)  
**OR**
- PHL 211 - Ethics (GE) (3)
- HEB 205 - Biblical Hebrew I (GE) (4) **and**
- HEB 206 - Biblical Hebrew II (GE) (4)  
**OR**
- GRK 207 - Biblical Greek I (GE) (4) **and**
- GRK 208 - Biblical Greek II (GE) (4)
- CHU 395 - The Christian Tradition (GE) (3)
- THE 495 - Justice in the Church: Gender, Households, and Unity in the Body of Christ (3)

Total: 34 Units

Students Must Also Complete a Required Concentration

### General Concentration

- **Choose four (4) upper division courses choosing one course in each of these areas: CMI, BIB, THE and PHL (12 units)\*\***
- **Choose four (4) upper division courses from the elective choices below (12 units)\*\***

Total: 24 units

Major Total: 58 units

### Biblical Studies Concentration

- **Choose three (3) upper division courses choosing one course in each of these areas: CMI, THE and PHL (9 units)\*\***
- **Choose five (5) upper division courses from the BIB elective choices below (15 units)\*\***

Total: 24 units

Major Total: 58 units

### Leadership Concentration

- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 350 - Church as a Witness to the World (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 410 - Leading in Ministry (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- CMI 450 - Internship (3)
- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, THE and PHL (9 units)\*\***
- **Choose three (3) interdisciplinary units from the following:**
- MGT 212 - Principles of Management (3)
- MGT 382 - Applied Entrepreneurship (3)
- MGT 470 - Nonprofit Organization Management (3)

Total: 33 units

Major Total: 67 units

### Philosophy Concentration

- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, CMI and THE (9 units)\*\***
- **Choose five (5) upper division courses from the PHL elective choices below (15 units)\*\***

Total: 24 units

Major Total: 58 units

### Theology Concentration

- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, CMI and PHL (9 units)\*\***
- **Choose five (5) upper division courses from the THE elective choices below (15 units)\*\***

Total: 24 units

Major Total: 58 units

### Youth and Family Concentration

- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 340 - Foundations for the Practice of Youth Ministry (3)
- CMI 350 - Church as a Witness to the World (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 425 - Youth and Family Ministry (3)
- CMI 450 - Internship (3)
  
- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, THE and PHL (9 units)\*\***
  
- **Choose two to four (2-4) interdisciplinary units from the following:**
- FCS 310 - Early Childhood Education (4)
- FCS 313 - Adolescent Development in the Family Context (2)
- PSY 308 - Developmental Psychology – Birth Through Adolescence (4)
- PSY 321 - Abnormal Psychology (3)
- SOC 250 - Sociology of the Family (3)

Total: 32-34 units

Major Total: 66-68 units

### \*\* Christian Studies Elective Options:

- BIB 301 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 302 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 314 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)
- BIB 335 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse (3)
- BIB 378 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- BIB 410 - Biblical Theology (3)
- BIB 413 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 490 - Special Studies in Bible (1-3)
- BIB 495 - Seminar in Biblical Literature (3)
- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 340 - Foundations for the Practice of Youth Ministry (3)
- CMI 345 - Enacting Worship (3)
- CMI 350 - Church as a Witness to the World (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 410 - Leading in Ministry (3)

- CMI 415 - The Church of the Nazarene: History and Polity (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- CMI 425 - Youth and Family Ministry (3)
- CMI 490 - Special Studies in Christian Ministry (1-3)
- THE 305 - Christian Faith and the Natural Sciences (3)
- THE 315 - Christian and Religious Themes in Literature (3)
- THE 320 - The World's Faith Traditions (3)
- THE 325 - The Human Person and Theology and Psychology (3)
- THE 330 - Christ and the Church (3)
- THE 335 - Christian Ethics (3)
- THE 410 - The Ministry and Sermons of John Wesley (3)
- THE 415 - Three Traditions of Protestant Theology (3)
- PHL 277 - Logic (3)
- PHL 301 - Plato and Aristotle (3)
- PHL 302 - Descartes through Hegel (3)
- PHL 321 - Justice, Politics, and the Social World (3)
- PHL 331 - Existential Philosophy and Literature (3)
- PHL 341 - Philosophy and Art (3)
- PHL 360 - Philosophy and the Sciences (3)
- PHL 371 - Education and the Ethical Life (3)
- PHL 380 - Alienation, Transformation, and Reconciliation in Film (3)
- PHL 381 - Ethics, Responsibility, and Love (3)

## Communication, B.A.

### Program Learning Outcomes

**Students who complete the program in Communication will be able to:**

1. Learn basic theory and application or performance skills about and within the discipline of communication.
2. Use communication competently in a variety of complex environmental and social contexts.
3. Participate in the disciplines of communication in the collective community around them.

### Required Concentrations

*Choose one of the following concentrations:*

Concentration A: Societal Communication

Concentration B: Public Address

### Lower-Division Core Requirements

- COM 190 - Interpersonal Communication (3)
- COM 195 - Media Literacy (3)
- COM 220 - Small Group Communication (3)
- COM 231 - Argumentation and Debate (GE) (3)
- JRN 250 - Introduction to Journalism (3)

Total: 15 Units

### Upper-Division Core Requirements

- COM 422 - Portfolio Construction (1)
- COM 460 - Rhetorical Theories and Models (3)
- COM 465 - Communication Theories and Research (3)
- COM 485 - Communication, Values, and Society (2)

Total: 9 Units

### Upper-Division Electives – 12 Units

Choose 12 units from:

- COM 310 - Nonverbal Communication (3)
- COM 312 - Gender and Communication (WS) (3)
- COM 330 - Persuasion (3)
- COM 365 - Intercultural Communication (3)
- COM 390 - Introduction to Public Relations (3)
- COM 490 - Special Studies in Communication (1-3) (3) **Units required**

Total: 12 Units

### Required Concentrations

#### Concentration A: Societal Communication

#### Requirements:

COM 421 - Internship in Communication (3)

*Choose one (1) course from:*

SOC 101 - Introduction to Sociology (GE) (3)\*\*

SOC 201 - Cultural Anthropology (GE) (3)

**Choose two (2) courses from:**

COM 260 - Advanced Public and Professional Speaking (3)

PSY 320 - Social Psychology (3)

PSY 345 - Group Dynamics (3)

WRI 365 - Writing for Professional Careers (3)

Note(s):

*\*\*Meets a general education requirement.*

Total Combined Core & Societal Communication Concentration Requirements: 48 Units

## Concentration B: Public Address

### Requirements:

COM 260 - Advanced Public and Professional Speaking **(3)**

COM 315 - Oral Interpretation **(3)**

*Choose one (1) course from:*

TRE 250 - Voice and Diction **(2)**

TRE 270 - Acting I **(3)**

*Complete 3 units from the following:*

COM 210 - Communication Practicum I **(1-2)**

COM 420 - Communication Practicum II **(1-2)**

Total Combined Core & Public Address Concentration Requirements: 47 - 48 Units

## Composition, Bachelor of Music

### Program Learning Outcomes

*Students who complete the program in Composition will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate mastery of advanced tonal, timbral and formal concepts.
6. Synthesize applications of diverse genres and media in the composition of original works using small and large ensembles, atonal materials, and electronic media.
7. Produce a substantial body of original compositions using a variety of tonal languages, performance forces and expressive content.

### Core Curriculum

*(Required of all Music majors)*

### Applied:

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

## Music History:

- MUH 101 - Introduction to Listening (GE) (2)
- MUH 331 - Music History and Literature I (2)
- MUH 332 - Music History and Literature II (2)
- MUH 334 - World Music (2)
- MUH 431 - Faith, Life, and Music (2)

## Music Theory:

- MUT 120 - Music Theory I (4)
- MUT 121 - Music Theory II (4)
- MUT 220 - Music Theory III (3)

Total: 31 Units

## Requirements

*For the Bachelor in Music with a concentration in Composition, the following courses are required in addition to the Core Curriculum indicated above :*

- MUC 252 - Private Composition (1-2) (2) **Units required**
  - MUC 352 - Private Composition (1-2) (4) **Units required**
  - MUC 452 - Private Composition (1-2) (4) **Units required**
  - MUC 477 - Senior Recital in Composition (0)
  - MUA 101 - Recital Attendance - 4 semesters (0) - 4 semesters
  
  - MUA 313 - Instrumental Conducting (2) **OR**
  - MUA 312 - Choral Conducting and Literature (2)
  
  - MUH 333 - Music History and Literature III (2)
  - *Upper-division music theory (12)*
  - *Voice (class or private) (2)*
  - *One-unit Ensembles (4)*
  - *Music Electives (15)*
- Total additional requirements: 47 units**

## Special Requirements

1. A solo Junior Recital of at least 30 minutes given during the junior or senior year is required of Music majors selecting majors in Performance and Music Education. The student must achieve the 300-level of proficiency before scheduling the Junior Recital. The student must also enroll for the appropriate level of applied study during the semester of the recital performance.
2. Students accepted into performance degree programs must achieve the 300-level of proficiency in their performing area and give a Junior Recital during their junior year. They must also achieve the 400- level of proficiency and give a solo Senior Recital , one hour in length, during their senior year. The performance degree programs are reserved for students of marked talent and proficiency.

3. For graduation, Bachelor of Music and Music Education majors must earn credit in a one-unit ensemble for a minimum of eight semesters. Bachelor of Arts majors must earn credit in a one-unit ensemble for a minimum of four semesters. Wind, string, and percussion students meet this requirement by performing in the Concert Band or Chamber Orchestra. Vocalists meet this requirement by performing in Chorale, Concert Choir or Point Loma Singers. Keyboard students may choose either choral or instrumental ensembles.
4. Music majors are required to perform in Monday afternoon student recitals at least once per semester until applied study requirements are completed.

## **Computer Science: Software Engineering, B.A.**

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

### Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)
- MTH 164 - Calculus I (GE) (4) \*
- MTH 203 - Introduction to Statistics (3) \*\*
- PHL 211 - Ethics (GE) (3)

Total Lower Division Units: 21 (14 non-GE units)

### Note(s):

\*MTH 144 may substitute for MTH 164 .

\*\* MTH 363 - Calculus Based Statistics with R (3) or MTH 383 - Mathematical Probability and Statistics (3) may substitute for this class.

### Upper-Division Requirements

- BUS 313 - Administrative Communication (3)
- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- CSC 394 - Programming Languages (4)

- CSC 454 - Computer Architecture and Assembly Language (4)
- CSC 481 - Senior Seminar in Computer Science (1)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 343 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2) **AND**
- CSC 499 - Independent Research in Computer Science II (1)
- ISS 472 - Internship in Information Systems (2)
- HON 498 - Honors Project I (2) **AND**
- HON 499 - Honors Project II (1)

Total Upper Division Units: 30-31

4-5 additional units chosen from:

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- CSC 412 - Topics in Computer Science (2)
- CSC 491 - Independent Studies in Computer Science (1-4)
- CSC 493 - Software Project (3)
- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2)
- CSC 499 - Independent Research in Computer Science II (1)
- ISS 373 - Networking and Security (3)
- ISS 392 - Topics in Cyber Security (2)
- ISS 403 - Information and Computer Security (3)
- ISS 472 - Internship in Information Systems (2)
- MTH 174 - Calculus II (4)
- MTH 233 - Linear Algebra (3)
- MTH 274 - Calculus III (4)
- MTH 373 - Mathematical Modeling (3)
- HON 498 - Honors Project I (2)
- HON 499 - Honors Project II (1)

Total Units: 49 Units Without GE

**Computer Science: Software Engineering, B.S.**

Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

## Lower Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)
- MTH 164 - Calculus I (GE) (4) \*
- MTH 174 - Calculus II (4)
- MTH 203 - Introduction to Statistics (3) \*\*
- PHL 211 - Ethics (GE) (3)

Total Lower Division Units: 25 (18 units other than GE)

\*MTH 144 may substitute for MTH 164 .

\*\* MTH 363 - Calculus Based Statistics with R (3) or MTH 383 - Mathematical Probability and Statistics (3) may substitute for this class.

## Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- CSC 394 - Programming Languages (4)
- CSC 454 - Computer Architecture and Assembly Language (4)
- CSC 481 - Senior Seminar in Computer Science (1)
- CSC 493 - Software Project (3)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 343 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2) **AND**
- CSC 499 - Independent Research in Computer Science II (1)

- ISS 472 - Internship in Information Systems (2)
- HON 498 - Honors Project I (2) AND
- HON 499 - Honors Project II (1)

**Total Upper Division Units: 33-34**

6-7 additional units chosen from (7 units if ISS472 chosen for sequence above):

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- CSC 412 - Topics in Computer Science (2)
- CSC 491 - Independent Studies in Computer Science (1-4)
- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2)
- CSC 499 - Independent Research in Computer Science II (1)
- HON 498 - Honors Project I (2)
- HON 499 - Honors Project II (1)
- ISS 373 - Networking and Security (3)
- ISS 392 - Topics in Cyber Security (2)
- ISS 403 - Information and Computer Security (3)
- ISS 472 - Internship in Information Systems (2)

**Total Elective Units: 6-7**

Total: 59 Units Without GE

## **Computer Science: Technical Applications, B.S.**

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

### Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)

- CSC 254 - Data Structures and Algorithms (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 203 - Introduction to Statistics (3) \*
- MTH 233 - Linear Algebra (3)
- PHL 211 - Ethics (GE) (3)

Total: 28 Units (22 units other than GE)

\* MTH 363 - Calculus Based Statistics with R (3) or MTH 383 - Mathematical Probability and Statistics (3) may substitute for this class.

## Upper-Division Requirements

- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- CSC 394 - Programming Languages (4)
- CSC 454 - Computer Architecture and Assembly Language (4)
- CSC 481 - Senior Seminar in Computer Science (1)
- CSC 493 - Software Project (3)
- ISS 373 - Networking and Security (3)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 343 - Discrete Mathematics (3)

## Elective Options

Choose one sequence from:

- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2) *AND*
- CSC 499 - Independent Research in Computer Science II (1)
- ISS 472 - Internship in Information Systems (2)
- HON 498 - Honors Project I (2) *AND*
- HON 499 - Honors Project II (1)

**Total Upper Division Units: 31-32**

5-6 additional units chosen from:

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- CSC 412 - Topics in Computer Science (2)
- CSC 491 - Independent Studies in Computer Science (1-4)
- CSC 495 - Service Learning in Computer Science (3)

- CSC 498 - Independent Research in Computer Science I (2)
  - CSC 499 - Independent Research in Computer Science II (1)
  - ISS 342 - Project Management and Quality Assurance (2)
  - ISS 392 - Topics in Cyber Security (2)
  - ISS 403 - Information and Computer Security (3)
  - ISS 472 - Internship in Information Systems (2)
  - MTH 274 - Calculus III (4)
  - MTH 373 - Mathematical Modeling (3)
  - HON 498 - Honors Project I (2)
  - HON 499 - Honors Project II (1)
- Total Elective Units: 5-6 (6 if ISS472 selected above in choose one)**

Total: 59 Units Without GE

Note(s):

*An elective class may not count as both upper-division core and a required "additional elective."*

## **Cross Disciplinary Studies: Integrated Education B.A.**

### **Program Learning Outcomes**

Cross-Disciplinary Studies: Integrated Education offers a broad interdisciplinary education, grounded in educational theory and practice, utilizing courses from the sciences, the humanities and the professional schools. This degree prepares candidates for a variety of post-graduate professional and academic experiences in workplace training, instructional design, people management and leadership.

Candidates who complete the program in Cross Disciplinary Studies: Integrated Education will be able to do the following:

1. Demonstrate effective presentation skills, one-on-one and with groups.
2. Produce effective written communication.
3. Employ critical thinking and logic to solve problems in a variety of professional environments.
4. Demonstrate information literacy by acquiring and utilizing specific content from a variety of sources to plan teaching and learning events.
5. Apply an interdisciplinary understanding of content regarding diverse and cross-cultural communities.
6. Apply faith-based influences and beliefs within professional/educational settings.
7. Reflect on and engage in spiritual growth opportunities in personal and professional settings.
8. Serve effectively within their communities.

### **Required Concentrations**

The candidate majoring in Cross-Disciplinary Studies: Integrated Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 9 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

Reading, Language and Literature  
Visual and Performing Arts  
Physical Education/Health  
Human Development  
Science  
Math  
History and Social Science  
Pre-Business  
Media Communication

### Lower Division Requirements:

- BIB 101 - Old Testament History and Religion (GE) **(2)**
- BIB 102 - New Testament History and Religion (GE) **(3)**
- BIO 103 - Introduction to Biology (GE) **(3)**
- COM 100 - Principles of Human Communication (GE) **(3)**
- EXS 201 - Fundamentals of Fitness Assessment and Development **(2)**
- HIS 110 - World Civilizations I (GE) **(3)**
- HIS 120 - United States History from Early America to the Twentieth Century **(3)**
- LIT 200 - Literature and Culture (GE) **(2)**
- MTH 113 - College Algebra **(3)**
- MTH 213 - Fundamentals of Elementary Mathematics I **(3)**
- MTH 223 - Fundamentals of Elementary Mathematics II **(3)**
- PSC 111 - Physical Science for Teachers (GE) **(4)**
- PSC 112 - Earth and Space Science for Teachers **(3)**
- PSY 101 - Psychology of Personal Development - First Year Experience (GE) **(3)**
- OR
- PSY 103 - General Psychology (GE) **(3)**
- TRE 101 - Introduction to Theatre (GE) **(2)**
- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) **(4)**
- OR
- WRI 115 - College Composition: Writing - First Year Experience (GE) **(3)**
- AND
- WRI 116 - College Composition: Research - First Year Experience (GE) **(2)**

Choose one course from the following three:

- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- PED 100 - Fitness Through Movement (GE) **(2)**
- PED 200 - Optimal Health (GE) **(2)**

Choose one course from the following two:

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) **(4)**
- SOC 201 - Cultural Anthropology (GE) **(3)**

Choose one course from the following five:

- ART 100 - Introduction to Art (GE) (2)
- ART 102 - Fundamentals of Art (GE) (3)
- ART 200 - History of Art I (GE) (3)
- ART 201 - History of Art II (GE) (3)
- MUH 100 - Introduction to Music (GE) (2)

Choose one course from the following two:

- PHL 201 - Introduction to Philosophy (GE) (3)
- PHL 211 - Ethics (GE) (3)

Choose one course from the following four:

- LIT 350 - World Literature (GE) (3)
- LIT 351 - World Cinema (GE) (3)
- LIT 352 - Diverse Voices in American Literature (GE) (3)
- LIT 353 - Women Writers (GE) (3)

Choose one of the following sequences:

- SPA 101 - Elementary Spanish I (GE) (4) AND
- SPA 102 - Elementary Spanish II (GE) (4)
- OR
- FRE 101 - Elementary French I (GE) (4) AND
- FRE 102 - Elementary French II (GE) (4)
- OR
- GER 101 - Elementary German I (GE) (4) AND
- GER 102 - Elementary German II (GE) (4)

## Upper Division Requirements

- COM 365 - Intercultural Communication (3)
- HIS 370 - California History (4)
- LIT 325 - Children's Literature (3)
- SOC 360 - Race and Ethnicity (3)
- MGT 382 - Applied Entrepreneurship (3)
- **ECO\*\*\* (3) Consult with EDU department for course options.**

Choose one course from the following two:

- ART 325 - Non-Western Art History (3)
- MUH 334 - World Music (2)

Choose one course from the following two:

- CHU 395 - The Christian Tradition (GE) (3)

- THE 306 - The Life of Holiness (GE) (3)

Choose one course from the following two:

*\*LIT351 cannot count in both the major and GE requirement. Choose LIT488 or complete LIT351 plus an additional upper division LIT GE option.*

- LIT 351 - World Cinema (GE) (3)
- LIT 448 - Postcolonial Classics and Theory (3)

Choose one course from the following three:

- MTH 303 - Problem Solving (GE) (3)
- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)

Choose one course from the following two:

- PSY 308 - Developmental Psychology – Birth Through Adolescence (4)
- FCS 120 - Child and Adolescent Development (4)

Total: 29 Units

## Integrated Education Upper Division Requirements

- EDU 302 - Foundations of Education and Learning Theory (3)
- EDU 404 - Foundations of Special Education (3)
- EDU 417 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)

Total: 8 Units

## Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Integrated Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 9 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

## Reading, Language and Literature

### English Emphasis

- LIT 250 - Introduction to the Study of Literature (3)  
**Linguistics and Writing - one upper division 3 unit course**  
**Literature Survey - one lower division 3 unit course**  
**Literature Survey - one upper division 3 unit course**

### French Emphasis

- FRE 250 - Intermediate French I (3)
- FRE 251 - Intermediate French II (3)
- FRE 315 - French Culture and Civilization (3)
- FRE 320 - Survey of French Literature (3)

### Spanish Emphasis

- SPA 251 - Intermediate Spanish II (3)
- SPA 302 - Advanced Grammar and Reading (3)
- SPA 303 - Advanced Conversation and Composition (3)  
Choose one:
- SPA 310 - Latin American Culture and Civilization (3)
- SPA 315 - Culture and Civilization of Spain (3)
- SPA 320 - Mexican American Literature and Culture (3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)

### Visual and Performing Arts

#### Art Emphasis

- ART 319 - Visual Arts in the Classroom I (3)
- TRE 354 - Movement I (3)  
Choose one:
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)  
Choose one:
- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 325 - Non-Western Art History (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)

#### Music Emphasis

- MUA 212 - Beginning Conducting (2)
- MUE 341 - Music Skills for the Elementary Classroom Teacher (3)
- TRE 354 - Movement I (3)
- Private Lessons or Instrumental Band (2 units)

Choose one of the following 3 courses:

- MUH 100 - Introduction to Music (GE) (2)
- MUH 101 - Introduction to Listening (GE) (2)
- MUH 334 - World Music (2)

#### Theatre Emphasis

- TRE 270 - Acting I (3)
- TRE 354 - Movement I (3)
- TRE 436 - Stagecraft Techniques (2)

- ART 319 - Visual Arts in the Classroom I **(3)**
- MUA 332 - Musical Theatre Production **(1-2)**

## Physical Education/Health

- KIN 312 - Motor Learning and Motor Development **(3)**
- PED 220 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 200 - Optimal Health (GE) **(2)**
- 2-3 units of an approved Education, Kinesiology or Physical Education course **(2-3 units)**.

Choose one:

- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- PSY 360 - Human Sexuality **(3)**

## Human Development

- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**

Choose one:

- FCS 120 - Child and Adolescent Development **(4)**
- FCS 150 - Human Development **(3)**

Choose one:

- PSY 320 - Social Psychology **(3)**
- SOC 250 - Sociology of the Family **(3)**

Choose one:

- FCS 420 - Child Development in the Family and Community **(4)**
- PSY 380 - Family Development and Family Therapies **(3)**

## Science

- BIO 210 - Cell Biology and Biochemistry (GE) **(4)**
- BIO 211 - Ecological and Evolutionary Systems (GE) **(4)**

Choose one:

- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) **(4)**
- CHE 152 - General Chemistry I (GE) **(4)**

## Math

Individualized programs will be designed with a Math advisor beginning with the sophomore year.

## History and Social Science

### International Studies Emphasis

Choose one (if 4 units) or two courses:

- POL 230 - Introduction to International Relations **(4)**
- POL 290 - World Regional Geography **(3)**
- SOC 201 - Cultural Anthropology (GE) **(3)**

Choose two:

- HIS 355 - Modern Middle East (4)
- HIS 415 - Europe and the World (4)
- POL 435 - Global Governance (4)
- POL 437 - International Economics (4)

### Urban American Studies Emphasis

- HIS 370 - California History (4)
- Choose two:
- HIS 425 - United States Since 1914 (4)
  - HIS 435 - Asian-American History: 1800 to the Present (4)
  - HIS 480 - San Diego Urban History (4)
  - POL 360 - Urban Politics (4)

### Business Emphasis

- ACC 200 - Principles of Accounting for Non-Business Majors (3)
- MGT 212 - Principles of Management (3)
- MKT 332 - Principles of Marketing (3)

Choose one from the following:

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)

### Media Communication

- COM 175 - Scriptwriting for Television and Film (3)
- COM 195 - Media Literacy (3)
- COM 243 - Introduction to TV and Film Production (3)
- COM 365 - Intercultural Communication (3)

## **Cross Disciplinary Studies: Teacher Education, B.A.**

Each course in this section requires 20 hours in a field placement in order to meet the required field hours toward the California Preliminary Teaching Credential.

### Program Learning Outcomes

Cross-Disciplinary Studies: Teacher Education prepares candidates for a successful K-12 teaching career. Within the degree are credential courses approved by the California Commission on Teacher Credentialing.

Candidates who complete the program in Cross-Disciplinary Studies: Teacher Education will be able to do the following:

1. Demonstrate effective presentation skills, one-on-one and with groups.
2. Produce effective written communication.

3. Employ critical thinking and logic to solve problems in a variety of environments, to include the K-6 classroom.
4. Demonstrate information literacy by acquiring and utilizing specific content information from a variety of sources for classroom instructional planning.
5. Apply an interdisciplinary understanding of content regarding diverse and cross-cultural communities.
6. Apply faith-based influences and beliefs within professional/educational settings.
7. Reflect on and engage in spiritual and professional growth opportunities in personal and professional and educational settings.
8. Serve effectively within their communities and in educational settings.

## Concentrations

- Reading, Language and Literature
- Visual and Performing Arts
- Physical Education/Health
- Human Development
- Science
- Math
- History and Social Science

## Lower-Division Requirements

- BIB 101 - Old Testament History and Religion (GE) **(2)**
- BIB 102 - New Testament History and Religion (GE) **(3)**
- BIO 103 - Introduction to Biology (GE) **(3)**
- COM 100 - Principles of Human Communication (GE) **(3)**
- HIS 110 - World Civilizations I (GE) **(3)**
- HIS 120 - United States History from Early America to the Twentieth Century **(3)**
- LIT 200 - Literature and Culture (GE) **(2)**
- MTH 113 - College Algebra **(3)** (or passing placement exam scores)
- MTH 213 - Fundamentals of Elementary Mathematics I **(3)**
- MTH 223 - Fundamentals of Elementary Mathematics II **(3)**
- PSC 111 - Physical Science for Teachers (GE) **(4)**
- PSC 112 - Earth and Space Science for Teachers **(3)**
- PSY 101 - Psychology of Personal Development - First Year Experience (GE) **(3) OR**
- PSY 103 - General Psychology (GE) **(3)**
- TRE 101 - Introduction to Theatre (GE) **(2)**
- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) **(4) OR**
- WRI 115 - College Composition: Writing - First Year Experience (GE) **(3) AND**
- WRI 116 - College Composition: Research - First Year Experience (GE) **(2)**

Choose one course from the following 3 courses:

- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- PED 100 - Fitness Through Movement (GE) **(2)**
- PED 200 - Optimal Health (GE) **(2)**

Choose one course from the following 2 courses:

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 201 - Cultural Anthropology (GE) (3)

Choose one course from the following 5 courses:

- ART 100 - Introduction to Art (GE) (2)
- ART 102 - Fundamentals of Art (GE) (3)
- ART 200 - History of Art I (GE) (3)
- ART 201 - History of Art II (GE) (3)
- MUH 100 - Introduction to Music (GE) (2)

Choose one course from the following 2 courses:

- PHL 201 - Introduction to Philosophy (GE) (3)
- PHL 211 - Ethics (GE) (3)

Choose one of the following sequences:

- SPA 101 - Elementary Spanish I (GE) (4) **AND**
- SPA 102 - Elementary Spanish II (GE) (4)
  
- FRE 101 - Elementary French I (GE) (4) **AND**
- FRE 102 - Elementary French II (GE) (4)
  
- GER 101 - Elementary German I (GE) (4) **AND**
- GER 102 - Elementary German II (GE) (4)

Total: 65-69 Units

## Upper-Division Requirements

- ART 319 - Visual Arts in the Classroom I (3)
- HIS 370 - California History (4)
- LIT 325 - Children's Literature (3)
- MUE 341 - Music Skills for the Elementary Classroom Teacher (3)
- PED 308 - Methods of Teaching Physical Education (3)

Choose one course from the following 2 courses:

- CHU 395 - The Christian Tradition (GE) (3)
- THE 306 - The Life of Holiness (GE) (3)

Choose one course from the following 3 courses:

- MTH 303 - Problem Solving (GE) **(3)**
- MTH 144 - Calculus With Applications (GE) **(4)**
- MTH 164 - Calculus I (GE) **(4)**

Choose one course from the following 2 courses:

- FCS 120 - Child and Adolescent Development **(4)**
- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**

Choose one course from the following 4 courses:

- LIT 350 - World Literature (GE) **(3)**
- LIT 351 - World Cinema (GE) **(3)**
- LIT 352 - Diverse Voices in American Literature (GE) **(3)**
- LIT 353 - Women Writers (GE) **(3)**

Total 29-30 Units

## Upper Division Requirements in Education

Each course in this section requires 20 hours in a field placement in order to meet the required field hours toward the California Preliminary Teaching Credential. \*\*

- EDU 302 - Foundations of Education and Learning Theory **(3)**
- EDU 306 - Principles of Language Acquisition **(3)**
- EDU 324 - Differentiated Mathematics Instruction for All Learners **(3)**
- EDU 404 - Foundations of Special Education **(3)**
- EDU 417 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**

Total: 14 Units

## Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Teacher Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 9 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

## Reading, Language, and Literature

### English Emphasis

- LIT 250 - Introduction to the Study of Literature **(3)**  
Linguistics and Writing - One Upper Division Course(3)  
Literature Survey - One Lower Division Course (3)  
Literature Survey - One Upper Division Course (3)

### French Emphasis

- FRE 250 - Intermediate French I **(3)**
- FRE 251 - Intermediate French II **(3)**
- FRE 315 - French Culture and Civilization **(3)**
- FRE 320 - Survey of French Literature **(3)**

### Spanish Emphasis

- SPA 251 - Intermediate Spanish II **(3)**
- SPA 302 - Advanced Grammar and Reading **(3)**
- SPA 303 - Advanced Conversation and Composition **(3)**

Choose one:

- SPA 310 - Latin American Culture and Civilization **(3)**
- SPA 315 - Culture and Civilization of Spain **(3)**
- SPA 320 - Mexican American Literature and Culture **(3)**
- SPA 380 - Genre/period Studies in Hispanic Literature or Film **(3)**

### Visual and Performing Arts

#### Music Emphasis

- MUA 212 - Beginning Conducting **(2)**
- MUE 341 - Music Skills for the Elementary Classroom Teacher **(3)**
- TRE 354 - Movement I **(3)**
- Private Lessons or Instrumental Band **(2 units)**

Choose one:

- MUH 100 - Introduction to Music (GE) **(2)**
- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 334 - World Music **(2)**

#### Art Emphasis

- ART 319 - Visual Arts in the Classroom I **(3)**
- TRE 354 - Movement I **(3)**

Choose one:

- ART 104 - Three-Dimensional: Composition and Space Design **(3)**
- ART 115 - Drawing I **(3)**

Choose one:

- ART 304 - Modern Art History **(3)**
- ART 305 - Contemporary Art History **(3)**

- ART 325 - Non-Western Art History **(3)**
- ART 335 - Design History: Industrial Revolution to Contemporary Design **(3)**

### Theatre Emphasis

- TRE 270 - Acting I **(3)**
- TRE 354 - Movement I **(3)**
- TRE 436 - Stagecraft Techniques **(2)**
- ART 319 - Visual Arts in the Classroom I **(3)**
- MUA 332 - Musical Theatre Production **(1-2)**  
OR
- TRE 350 - Musical Theatre **(3)**

### Physical Education/Health

- KIN 312 - Motor Learning and Motor Development **(3)**
- PED 200 - Optimal Health (GE) **(2)**
- PED 220 - Team Sports Fundamentals and Strategies (GE) **(2)**  
2-3 units of an approved Education, Kinesiology or Physical Education course.

Choose one:

- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- PSY 360 - Human Sexuality **(3)**

### Human Development

- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**

Choose one:

- FCS 120 - Child and Adolescent Development **(4)**
- FCS 150 - Human Development **(3)**

Choose one:

- PSY 320 - Social Psychology **(3)**
- SOC 250 - Sociology of the Family **(3)**

Choose one:

- FCS 420 - Child Development in the Family and Community **(4)**
- PSY 380 - Family Development and Family Therapies **(3)**

### Science

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

Choose one:

- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4)
- CHE 152 - General Chemistry I (GE) (4)

## Math

Individualized programs will be designed with a Math advisor beginning with the sophomore year.

## History and Social Science

### International Studies Emphasis

Choose one (if 4 units) or 2 courses:

- POL 230 - Introduction to International Relations (4)
- POL 290 - World Regional Geography (3)
- SOC 201 - Cultural Anthropology (GE) (3)

Choose two:

- HIS 355 - Modern Middle East (4)
- HIS 415 - Europe and the World (4)
- POL 435 - Global Governance (4)
- POL 437 - International Economics (4)

### Urban American Studies Emphasis

Required:

- HIS 370 - California History (4)

Choose two:

- HIS 435 - Asian-American History: 1800 to the Present (4)
- HIS 480 - San Diego Urban History (4)
- HIS 425 - United States Since 1914 (4)
- POL 360 - Urban Politics (4)

Note(s):

**Completion of this program partially fulfills requirements for a Teaching Credential in the State of California. Refer to the School of Education website for further information.**

**Teacher Education majors must earn a grade of C- or higher in all courses required by the major and in all 400-level elective courses to get credit towards the major.**

**\*\* Failure to complete the fieldwork requirement in an Education (EDU) course will result in a non-passing grade for that course.**

## **Dietetics, B.S.**

### Program Learning Outcomes

**Students who complete the program in Dietetics will be able to:**

1. Demonstrate content knowledge of nutrient needs of growth and development on nutrient needs during the lifecycle stages of prenatal through elderly.
2. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
3. Apply content knowledge to disease prevention and treatment, and develop skills in teaching/counseling nutrition knowledge to individuals or groups.
4. Understand the food and food systems foundation through techniques of food preparation and application to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups.
5. Apply knowledge of the physical and biological science foundation as it relates to physiology of the body, nutrient sources, and nutrient function.
6. Utilize principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation necessary for the implementation of food and nutrition services in professional settings.
7. Analyze, interpret, and evaluate current evidence-based research related to nutrition topics.
8. Develop skills at writing science-based papers using analyzed research data as references.
9. Examine cultural differences in food choices and ethics when working with peoples of diverse ethnic, religious, and financial backgrounds.
10. Evaluate the effects of societal, cultural, and financial dynamics upon diet trends, dietary choices, and food preparation methods among families and societies.
11. Identify career paths and access appropriate career plans for identifying professional area of service in dietetics.

### Lower-Division Requirements

- FCS 101 - Introduction to Family and Consumer Sciences (1)
- FCS 110 - Fundamentals of Food (2)
- FCS 150 - Human Development (3)
- FCS 225 - Fundamentals of Nutrition (3)
- FCS 230 - Personal and Consumer Financial Management (2)
- FCS 250 - Introduction to Family and Consumer Sciences Research (1)
- ACC 200 - Principles of Accounting for Non-Business Majors (3)
- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 140 - Human Anatomy and Physiology II (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 220 - Microbiology of Infectious Diseases (4)
- MGT 212 - Principles of Management (3)
- CHE 151 - General Chemistry Tutorial (1)

- CHE 152 - General Chemistry I (GE) **(4)**
- CHE 153 - General Chemistry II **(4)**
- CHE 294 - Organic Chemistry I **(4)**
- MTH 203 - Introduction to Statistics **(3)**
- PHL 211 - Ethics (GE) **(3)**
- SOC 201 - Cultural Anthropology (GE) **(3)**

Total: 57 Units

## Upper-Division Requirements

- FCS 300 - Food Economics and Management **(2)**
- FCS 303 - Cultural Foods **(2)**
- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- FCS 330 - Community Nutrition **(3)**
- FCS 331 - Community Nutrition Practicum **(1)**
- FCS 335 - Nutrition Research Through the Life Cycle **(2)**
- FCS 365 - Advanced Nutrition **(3)**
- FCS 414 - Practices in Nutrition Education and Dietary Counseling **(2)**
- FCS 415 - Medical Nutrition Therapy **(3)**
- FCS 417 - Medical Nutrition Therapy Practicum **(1)**
- FCS 435 - Food Service Production and Management **(3)**
- FCS 455 - Food Science **(3)**
- FCS 497 - Family and Consumer Sciences Senior Seminar **(2)**

Total: 30 Units

Major Total: 87

## Recommended Courses

- FCS 305 - Life Cycle Nutrition **(4)**
- FCS 340 - Nutrition in Women's Wellbeing (WS) **(2)**
- MKT 332 - Principles of Marketing **(3)**
- KIN 340 - Physiology of Exercise **(3)**

## Additional Information

The major in Dietetics requires 135 units to graduate, seven (7) more than the minimum 128 units required for most majors at PLNU. Students are encouraged to take one or two courses in the summer to lighten their course loads during the regular semester.

Students interested in becoming a Registered Dietitian should consult the Accreditation Council for Education in Nutrition and Dietetics (ACEND) for specific information: 120 South Riverside Plaza, Suite 2190, Chicago IL 60606-6995, 312-899-5400.

Graduates in the Dietetics major will require further training by applying to an ACEND-accredited internship program in order to complete Commission on Dietetic Registration (CDR) requirements to be a registered dietitian (R.D.).

## Majoring in Dietetics

Graduates in the Dietetics major from PLNU earn a Verification Statement that will allow them to apply to an ACEND-accredited dietetic internship program, the second step to becoming a Registered Dietitian (R.D.)

**To be verified at PLNU, the student must:**

- Earn a "C" or better in all courses for the Dietetics major required for the DPD
- Maintain a GPA of 2.800 or higher
- Earn a B.S. degree (official transcripts, including the one that shows an earned bachelor's degree, must be in the DPD file)
- Participate in community service learning activities during the program, as evidenced in the senior portfolio or in a project
- Demonstrate ethical principles and follow AND's Code of Ethics

## Students with a Bachelor's Degree from Another University Seeking a Verification Statement

If a student has earned a bachelor's degree from another university, and is seeking a Verification Statement for the Dietetics program, the student may choose one of the two following paths:

1. Apply to PLNU for a Verification Statement in the Dietetics program, with no degree attached (no second bachelor's degree). This pathway requires:
  - a. A bachelor's degree from a college/university in another major
  - b. Official transcripts reviewed by the Director of Dietetics and the undergraduate Director of Admissions
  - c. A minimum 24 units of upper-division Dietetics courses and prerequisites taken at PLNU. (Courses required will be based on previous coursework transferred, and the date that courses were taken)
  - d. Acceptance to PLNU

OR

2. Apply to PLNU for a second Bachelor of Science degree in Dietetics. This pathway requires:
  - a. Official transcripts reviewed by the Director of Dietetics and the undergraduate Director of Admissions
  - b. Coursework and prerequisites required for the Dietetics major
  - c. Coursework to meet all general education requirements at PLNU
  - d. Acceptance to PLNU

## International Students Seeking a Verification Statement

If a student is an International Student seeking a Verification Statement in Dietetics from PLNU, the student must apply to the University and submit the following:

- a. All documents including high school and college transcripts translated into English and evaluated by an approved credential evaluation service before being sent to the Admissions Office. The student may contact any credential evaluator approved by the National Association of Credential Evaluators (NACES), such as World Education Services, Inc. (WES), Academic Credentials Evaluation Institute, Inc. (ACEI), and Educational Credential Evaluators, Inc. (ECE).

- b. English proficiency: A 550 paper based TOEFL or 216 computer based TOEFL.
- c. An original notarized copy of an Affidavit of Support (financial statement) submitted by a sponsor or bank, indicating sufficient funds for the educational expenses for one academic year at PLNU. (Point Loma Nazarene is a private university; therefore, tuition is the same for U.S. residents and international students.)
- d. Acceptance to PLNU
- e. A minimum 24 units of upper-division Dietetics courses and prerequisites at PLNU. (Courses required will be based on previous coursework transferred, and the date that courses were taken.)

**To be verified at PLNU, the student must:**

- Earn a “C” or better in all core curriculum DPD classes
- Maintain a GPA of 2.800 or higher
- Take at least 24 units of upper-division DPD classes at PLNU
- Demonstrate ethical principles and follow AND’s Code of Ethics

## **Economics, B.S. Business Administration**

### **Program Learning Outcomes**

Students who complete the program in Economics will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate in-depth knowledge of economic theory in microeconomics, macroeconomics and econometrics.
7. Critically evaluate decisions using tools of economic analysis.
8. Analyze the effectiveness of economic policies to solve national and/or global economic issues.

### **Lower Division Requirements**

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

**Total: 28 Units**

### **Upper Division Requirements**

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required**

- ECO 310 - Intermediate Microeconomics (3)
- ECO 330 - Intermediate Macroeconomics (3)
- ECO 460 - Applied Econometrics (3)
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Choose 3 Courses From:

- ECO 315 - Theories of Economic Development (3)
- ECO 380 - Money and Banking (3)
- ECO 410 - International Economics (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- ECO 450 - History of Economic Thought (3)
- ECO 490 - Special Studies in Economics (3)

Total: 36 Units

Major Total: 64 Units

Recommended

- Cross-cultural experience
- PHL 211 - Ethics (GE) (3)

Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## Engineering Physics, B.S.

Program Learning Outcomes

**Students who complete the Engineering Physics program will:**

1. Develop an understanding of the fundamental principles of physics and of engineering.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.

7. Effectively collaborate in teams.

## Core Curriculum

The following courses are required of all Physics and Engineering Physics majors:

- EGR 110 - Computational Methods for Engineers and Scientists I **(1)**
- EGR 120 - Computational Methods for Engineers & Scientists II **(1)**
- PHY 241 - University Physics I (GE) **(4)**
- PHY 242 - University Physics II **(4)**
- PHY 304 - Modern Physics **(4)**
- PHY 341 - Analytical Mechanics **(4)**
- PHY 361 - Electricity, Magnetism, and Waves I **(3)**
- PHY 362 - Electricity, Magnetism, and Waves II **(3)**
- PHY 401 - Thermodynamics **(3)**
- PHY 431 - Quantum Mechanics **(3)**
- PHY 475 - Senior Laboratory and Student Project **(2)**
- PHY 495 - Seminar in Physics **(1)**
- CHE 152 - General Chemistry I (GE) **(4)**
- MTH 164 - Calculus I (GE) **(4)**
- MTH 174 - Calculus II **(4)**
- MTH 274 - Calculus III **(4)**
- MTH 333 - Differential Equations **(3)**

Total: 52 Units

## Recommended

- CSC 143 - Introduction to Computer Programming **(3)**
- CSC 154 - Objects and Elementary Data Structures **(4)**
- MTH 233 - Linear Algebra **(3)**

## Requirements

There are two possible options in the Engineering Physics Major:

- Emphasis in Mechanics
- Emphasis in Electrodynamics

### Emphasis in Mechanics

- EGR 215 - Engineering Mechanics **(3)**
- EGR 265 - Mechanics of Materials **(3)**
- EGR 352 - Analog Electronics **(2)**
- EGR 422 - Digital Electronics **(2)**

Complete one of the following courses

- PHY 311 - Nuclear Physics (3)
- PHY 443 - Solid State Physics (3)

Total: 13 Units

### Emphasis in Electrodynamics

- EGR 225 - Electronics Circuits Analysis (3)
- EGR 352 - Analog Electronics (2)
- EGR 422 - Digital Electronics (2)
- EGR 432 - Computer Interfacing (2)
- EGR 442 - Mobile Robotics (2)

Complete one of the following courses:

- PHY 311 - Nuclear Physics (3)
- PHY 443 - Solid State Physics (3)

Total: 14 Units

## **Environmental Science (Biology), B.S.**

The interdepartmental major in Environmental Science is designed to prepare students to monitor the quality of the environment, interpret the impact of human actions on terrestrial and aquatic ecosystems, and develop strategies for ecosystem restoration. Career opportunities in this field include conservation biology, environmental analysis, wildlife biology, environmental education, ecological research, environmental planning, resource management, and environmental chemistry.

### Program Learning Outcomes

**Students who complete the program in Environmental Science will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological.
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.
5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6. Be prepared for post-graduate studies or science-related careers.

### Lower-Division Requirements

- BIO 102 - Environment and People (GE) (4) \*\*
- BIO 210 - Cell Biology and Biochemistry (GE) (4) \*\*
- BIO 211 - Ecological and Evolutionary Systems (GE) (4) \*\*

- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4) \*\*
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4) \*\*

Choose one sequence: 8 Units

- PHY 141 - General Physics I (GE) (4) \*\*
- PHY 142 - General Physics II (GE) (4)
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

Choose one of three: 3 Units

- ECO 101 - Principles of Macroeconomics (GE) (3) \*\*
- ECO 102 - Principles of Microeconomics (GE) (3) \*\*
- SOC 201 - Cultural Anthropology (GE) (3) \*\*

Total: 45-46 Units

Note(s):

*\*Course can be waived*

### Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 363 - Conservation Ecology (3)
- BIO 497 - Biology Seminar (1)
- CHE 370 - Instrumental Analysis (2)
- MTH 363 - Calculus Based Statistics With R (3)

Total: 13 Units

### Upper-Division Electives (14 units minimum)

*Of the 14 required upper division electives, a minimum of 8 units of upper-division electives are required from approved environmental off-campus programs. Both departmental chairs (Biology and Chemistry) or their designees are responsible for approving all off-campus courses. At least one-half of upper-division units in the major must be taken at PLNU.*

*The following courses can be used to transfer in these 8 units:*

- EVS 396 - Advanced Biology (3)
- EVS 397 - Advanced Ecology (3)
- EVS 398 - Advanced Ecological Applications (3)
- EVS 399 - Public Policy and Stewardship (3)

### Advanced Science Electives (8 units minimum)

*One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 473 - Experimental Marine Ecology (3)
  
- BIO 450 - Advanced Biochemistry (4) **OR**
- CHE 450 - Advanced Biochemistry (4)
  
- CHE 304 - Organic Chemistry II (4)
- CHE 325 - Physical Chemistry I (4)
- CHE 351 - Organic Structure Elucidation (2)
- CHE 466 - Bioinorganic Chemistry (2)
- CHE 468 - Advanced Inorganic Chemistry (3)

### Other Related Electives (6 units minimum)

*Students can customize their degree by taking one course from each of the two categories below. One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

#### Methodology:

- BIO 352 - Research Methodology (2)
- BIO 490 - Internship in Biology (1-3)
- BIO 499 - Research in Biology (1-3)
- CHE 490 - Internship in Chemistry (1-3)
- CHE 499 - Research in Chemistry (1-2)

#### Public Policy and Stewardship:

- PHL 360 - Philosophy and the Sciences (3)
- POL 435 - Global Governance (4)

- POL 441 - Issues in Public Policy (4)

Upper-Division Total: 27 Units

Bachelor of Science Total: 72 - 73 Units \*\*

\*\*15 units meet general education requirements.

## Environmental Science (Chemistry), B.S.

The interdepartmental major in Environmental Science is designed to prepare students to monitor the quality of the environment, interpret the impact of human actions on terrestrial and aquatic ecosystems, and develop strategies for ecosystem restoration. Career opportunities in this field include conservation biology, environmental analysis, wildlife biology, environmental education, ecological research, environmental planning, resource management, and environmental chemistry.

### Program Learning Outcomes

Students who complete the program in Environmental Science will be able to:

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological.
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.
5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6. Be prepared for post-graduate studies or science-related careers.

### Lower-Division Requirements

- BIO 102 - Environment and People (GE) (4) \*\*
- BIO 210 - Cell Biology and Biochemistry (GE) (4) \*\*
- BIO 211 - Ecological and Evolutionary Systems (GE) (4) \*\*
- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4) \*\*
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4) \*\*

Choose one sequence: 8 Units

- PHY 141 - General Physics I (GE) (4) \*\*
- PHY 142 - General Physics II (GE) (4)

- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

Choose one of three: 3 Units

- ECO 101 - Principles of Macroeconomics (GE) (3) \*\*
- ECO 102 - Principles of Microeconomics (GE) (3) \*\*
- SOC 201 - Cultural Anthropology (GE) (3) \*\*

Total: 45-46 Units

Note(s):

*\*Course can be waived*

### Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 363 - Conservation Ecology (3)
- BIO 497 - Biology Seminar (1)
- CHE 370 - Instrumental Analysis (2)
- MTH 363 - Calculus Based Statistics With R (3)

Total: 13 Units

### Upper-Division Electives (14 units minimum)

*Of the 14 required upper division electives, a minimum of 8 units of upper-division electives are required from approved environmental off-campus programs. Both departmental chairs (Biology and Chemistry) or their designees are responsible for approving all off-campus courses. At least one-half of upper-division units in the major must be taken at PLNU.*

*The following courses can be used to transfer in these 8 units:*

- EVS 396 - Advanced Biology (3)
- EVS 397 - Advanced Ecology (3)
- EVS 398 - Advanced Ecological Applications (3)
- EVS 399 - Public Policy and Stewardship (3)

### Advanced Science Electives (8 units minimum)

*One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)

- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 473 - Experimental Marine Ecology (3)
  
- BIO 450 - Advanced Biochemistry (4) **OR**
- CHE 450 - Advanced Biochemistry (4)
  
- CHE 304 - Organic Chemistry II (4)
- CHE 325 - Physical Chemistry I (4)
- CHE 351 - Organic Structure Elucidation (2)
- CHE 466 - Bioinorganic Chemistry (2)
- CHE 468 - Advanced Inorganic Chemistry (3)

### Other Related Electives (6 units minimum)

*Students can customize their degree by taking one course from each of the two categories below. One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

#### Methodology:

- BIO 352 - Research Methodology (2)
- BIO 490 - Internship in Biology (1-3)
- BIO 499 - Research in Biology (1-3)
- CHE 490 - Internship in Chemistry (1-3)
- CHE 499 - Research in Chemistry (1-2)

#### Public Policy and Stewardship:

- PHL 360 - Philosophy and the Sciences (3)
- POL 435 - Global Governance (4)
- POL 441 - Issues in Public Policy (4)

Upper-Division Total: 27 Units

Bachelor of Science Total: 72 - 73 Units \*\*

*\*\* 15 units meet general education requirements.*

## **Exercise and Sport Science, B.A.**

Program Learning Outcomes

**Students who complete the program in Exercise and Sport Science will be able to:**

1. Explain the health benefits associated with physical activity and exercise, as well as the health consequences associated with inactivity.
2. Describe the metabolic, physiologic, biomechanical, and developmental mechanisms by which participation in physical activity aids in health promotion and disease prevention.
3. Critically evaluate and integrate new information into professional practice in order to solve relevant health problems; speak and write effectively to a target audience on the prevention and intervention of such problems.
4. Competently measure and assess fitness, movement skills, physical performance, and risk for disease.
5. Design an exercise or strength training program to enhance all components of fitness, promote health, and optimize performance.
6. Serve various populations, integrating compassionate care and the Christian faith with their professional practice.

## Lower-Division Requirements

- ATR 102 - Risk Management and Emergency Response **(1) and**
- ATR 102L - Risk Management and Emergency Response Laboratory **(1)**  
**OR** either Certification in First Aid and CPR or complete a DOT-compliant EMT-Basic course\*  
\*Student must provide course completion certificate.
- BIO 130 - Human Anatomy and Physiology I (GE) **(4)**
- BIO 140 - Human Anatomy and Physiology II **(4)**
- KIN 101 - Orientation to Kinesiology **(1)**
- KIN 280 - Introduction to Athletic Training **(2)**
- KIN 280L - Introduction to Athletic Training Lab **(1)**
- PED 200 - Optimal Health (GE) **(2)**
  
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) **(4)**  
**OR**
- CHE 152 - General Chemistry I (GE) **(4)**

## Lower-Division Elective

*Choose one course (2-3 units) from the following:*

- EXS 201 - Fundamentals of Fitness Assessment and Development **(2)**
- PED 220 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 225 - Individual and Dual Sports (GE) **(2)**
- FCS 225 - Fundamentals of Nutrition **(3)**

**Total: 22-24 Units**

## Upper-Division Requirements

- EXS 330 - Nutrition for Exercise and Sport Performance **(3)**
- EXS 350 - Fitness Assessment and Exercise Prescription **(3)**
- EXS 350L - Fitness Assessment and Exercise Prescription Lab **(1)**
- EXS 370 - Praxis of Strength Training and Conditioning **(3)**

- EXS 480 - Leadership in the Fitness Professions **(3)**
- KIN 312 - Motor Learning and Motor Development **(3)**
- KIN 325 - Structural Kinesiology **(2)**
- KIN 327 - Applied Biomechanics **(2)**
- KIN 340 - Physiology of Exercise **(3)**
- KIN 340L - Physiology of Exercise Lab **(1)**
- KIN 440 - Measurement, Statistics, and Evaluation of Human Performance **(3)**

## Required Concentration

*Choose at least six (6) units from one concentration below and two (2) units of Professional Experience for a total of eight (8) units. Other Upper Division units leading to a credential or minor such as teaching or nutrition may be substituted upon approval by the department chair.*

### Fitness Professional Concentration

- ATR 385 - Pathology of Injury and Illness **(3)**
- ATR 410 - Therapeutic Exercise **(3)**
- BUS 313 - Administrative Communication **(3)**
- FCS 305 - Life Cycle Nutrition **(4)**
- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- KIN 430 - Clinical Exercise Physiology **(3)**
- KIN 484 - Practicum in Kinesiology **(1-3)**
- KIN 488 - Internship in Kinesiology **(1-3)**
- KIN 490 - Special Studies in Kinesiology **(1-3)**

### Physical Education and Sport Performance Concentration

- BUS 313 - Administrative Communication **(3)**
- EDU 302 - Foundations of Education and Learning Theory **(3)**
- FCS 305 - Life Cycle Nutrition **(4)**
- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- PED 308 - Methods of Teaching Physical Education **(3)**
- KIN 484 - Practicum in Kinesiology **(1-3)**
- KIN 488 - Internship in Kinesiology **(1-3)**
- PED 350 - Foundations and Techniques of Coaching **(4)**
- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**

### Professional Experience Requirements

*Two units are required in Practicum and/or Internship and/or Special Studies. Each course may be repeated up to six (6) units.*

- KIN 484 - Practicum in Kinesiology **(1-3)**
- KIN 488 - Internship in Kinesiology **(1-3)**
- KIN 490 - Special Studies in Kinesiology **(1-3)**

Total: 36 Units

## **Finance, B.S. Business Administration**

### Program Learning Outcomes

Students who complete the program in Finance will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate an in-depth knowledge of financial management, investment and international finance theories.
7. Apply finance theories and tools in the analysis of business issues.

### Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
  
- MTH 153 - Mathematical Analysis for Business and Economics (3) *Or*
- MTH 173 - Business Calculus (GE) (3)
  
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 28 Units

### Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required (3)**
- FIN 335 - Business Finance (3)
- FIN 385 - Intermediate Finance (3)
- FIN 415 - Investments (3)
- FIN 425 - Financial Statement Analysis and Valuation (3)
- FIN 435 - International Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Choose One Elective From the Following Upper Division BUS/ECO Courses:

- BUS 340 - Real Estate Principles and Practices (3)
- ECO 310 - Intermediate Microeconomics (3)
- ECO 380 - Money and Banking (3)

Choose One Elective From the Following Upper Division ACC Courses:

- ACC 370 - Intermediate Accounting I (3)
- ACC 375 - Managerial Cost Accounting (3)
- ACC 410 - Federal Tax Accounting I (3)

Total: 36 Units

Major Total: 64 Units

## Recommended

Cross-cultural experience

- PHL 211 - Ethics (GE) (3)
- MTH 173 - Business Calculus (GE) (3)

Note(s):

- ECO101 or ECO102 fulfills general education Social World Requirement.
- PHL211 fulfills general education Philosophy Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.

## French, B.A.

### Program Learning Outcomes

**Students who complete the program in French will be able to:**

1. Write essays without significant errors of grammar, spelling, or vocabulary usage that would impede comprehension by a native speaker.
2. Comprehend the main idea and most details of connected oral discourse by a native speaker on a variety of topics.
3. Converse in a participatory fashion with a native speaker using a variety of language strategies to convey meaning.
4. Analyze and interpret target language texts and data sets according to their cultural, literary, and/or linguistic content.
5. Display knowledge of the nature and structure of language.
6. Discuss the influence of their own perspective on cultural interconnections through engagement with local, national, or international communities.

## Lower-Division Requirements

- FRE 101 - Elementary French I (GE) (4)
- FRE 102 - Elementary French II (GE) (4)
- FRE 250 - Intermediate French I (3)
- FRE 251 - Intermediate French II (3)  
OR Equivalent
- LIT 250 - Introduction to the Study of Literature (3)

Total: 17 Units

## Upper-Division Requirement

*In addition to the courses listed below, two courses must be taken abroad in France or a Francophone country (6 units) or 9 units of which 3 could be equivalent to one PLNU courses. Subject to Department approval. 6-9 Units.*

- FRE 303 - French Conversation (3)
- FRE 315 - French Culture and Civilization (3)
- FRE 320 - Survey of French Literature (3)
- FRE 325 - Francophone Literature (3)
- FRE 420 - Studies in French Literature (3)
- LIT 495 - Literary Theory and Scholarship (3)

Total: 24-27 Units

Total Major: 41-44 Units

## Graphic Design, B.A.

### Program Learning Outcomes

*Students who complete the program in Graphic Design with concentrations in Marketing, Interdisciplinary, Interactive Web, and Illustration will be able to:*

1. Use current graphic design tools and technologies to create, produce, and distribute visual messages.
2. Identify historically important design styles, movements, artists, and designers.
3. Write and speak intelligently about their design strategies, problem solving, aesthetic choices, and contemporary design trends.
4. Produce an entry-level professional quality portfolio of graphic design work to help secure employment in a design-related career or pursue graduate studies.
5. Articulate their own philosophy regarding mass media and its relationship to graphic design.

### Concentrations

- Marketing Concentration
- Interdisciplinary Concentration
- Interactive Web Concentration
- Illustration Concentration

## Marketing Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
  
- ART 200 - History of Art I (GE) (3) \* **OR**
- ART 201 - History of Art II (GE) (3) \*
  
- ART 202 - Introduction to Computer Graphics (3)
- ART 203 - Graphic Design I: Visual Symbolism (3)

Total: 18 Units

### Upper-Division Requirements

- ART 303 - Graphic Design II: Typography (3)
  
- ART 304 - Modern Art History (3) **OR**
- ART 305 - Contemporary Art History (3)
  
- ART 315 - Introduction to Interactive Web Design (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 450 - Interactive Web Design (3)
- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 470 - Internship (1-3)
- ART 471 - Graphic Design Portfolio Review (3)
  
- MKT 332 - Principles of Marketing (3)
  
- **Choose three (3) courses from the following:**
- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 336 - Integrated Marketing Communications (3)
- MKT 350 - Social Media and Digital Marketing (3)
- MGT 382 - Applied Entrepreneurship (3)

Total: 37 Units

## Interdisciplinary Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)

- ART 200 - History of Art I (GE) (3) \* **OR**
- ART 201 - History of Art II (GE) (3) \*
  
- ART 202 - Introduction to Computer Graphics (3)
- ART 203 - Graphic Design I: Visual Symbolism (3)
- ART 226 - Photography: Digital (3)
  
- **Choose one from the following:**
- ART 206 - Experimental Drawing Studio (3)
- ART 210 - Painting: Color and Technique (3)
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 223 - Printmaking I (3)

Total: 24 Units

### Upper-Division Requirements

- ART 303 - Graphic Design II: Typography (3)
  
- ART 304 - Modern Art History (3) **OR**
- ART 305 - Contemporary Art History (3)
  
- ART 315 - Introduction to Interactive Web Design (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 450 - Interactive Web Design (3)
- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 470 - Internship (1-3)
- ART 471 - Graphic Design Portfolio Review (3)
  
- **Choose one course from the following:**
- ART 310 - Painting II (3)
- ART 321 - Photography: Alternative Processes (3)
- ART 322 - Sculpture: Objects and Installation (3)
- ART 323 - Printmaking II (3)
- ART 326 - Photography: Contemporary Images (3)
- ART 331 - Illustration II (3)

Total: 28 Units

### Interactive Web Concentration

#### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)

- ART 200 - History of Art I (GE) (3) \* **OR**
- ART 201 - History of Art II (GE) (3) \*
- ART 202 - Introduction to Computer Graphics (3)
- ART 203 - Graphic Design I: Visual Symbolism (3)

**Choose one course from the following:**

- ART 206 - Experimental Drawing Studio (3)
- ART 210 - Painting: Color and Technique (3)
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 223 - Printmaking I (3)
- ART 226 - Photography: Digital (3)

Total: 21 Units

### Upper-Division Requirements

- ART 303 - Graphic Design II: Typography (3)
- ART 304 - Modern Art History (3) **OR**
- ART 305 - Contemporary Art History (3)
- ART 315 - Introduction to Interactive Web Design (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 450 - Interactive Web Design (3)
- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 470 - Internship (1-3)
- ART 471 - Graphic Design Portfolio Review (3)

**Choose one course from the following:**

- ART 321 - Photography: Alternative Processes (3)
- ART 331 - Illustration II (3)
- MGT 382 - Applied Entrepreneurship (3)

Total: 28 Units

### Illustration Concentration

#### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \* **OR**
- ART 201 - History of Art II (GE) (3) \*
- ART 202 - Introduction to Computer Graphics (3)

- ART 203 - Graphic Design I: Visual Symbolism (3)
- ART 210 - Painting: Color and Technique (3)

**Choose one course from the following:**

- ART 206 - Experimental Drawing Studio (3)
- ART 223 - Printmaking I (3)
- ART 226 - Photography: Digital (3)

Total: 24 Units

### Upper Division Requirements

- ART 303 - Graphic Design II: Typography (3)
- ART 304 - Modern Art History (3) **OR**
- ART 305 - Contemporary Art History (3)
- ART 315 - Introduction to Interactive Web Design (3)
- ART 330 - Illustration I (3)
- ART 331 - Illustration II (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3) **OR**
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 345 - Life Drawing (3)
- ART 450 - Interactive Web Design (3)
- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 470 - Internship (1-3)
- ART 471 - Graphic Design Portfolio Review (3)

Total: 31 Units

Note(s):

*\* Meets general education requirement in the fine arts*

## History, B.A.

### Program Learning Outcomes

**Students who complete the program in History will be able to:**

1. Complete a substantial historical project autonomously.
2. Demonstrate the relationship between primary and secondary materials by assessing a historian's work and recognizing the evidence used to construct that historical argument.
3. Present and analyze, in written or oral presentation, different perspectives on an event from the past.
4. Have an academic transcript that shows courses with content that ranges over time, space, culture, and qualitative and quantitative historical methods.
5. Find appropriate materials online, in a library, or in the community and know how to cite them.

## Lower-Division Requirements

- HIS 270 - Research Methods (4)

## Upper-Division Requirements

- HIS 470 - Senior Seminar in History (4)

## Non-Western electives

Select 8 units from the following

- HIS 340 - Russia to 1900 (4)
- HIS 342 - Twentieth-Century Russia and the Soviet Union (4)
- HIS 350 - Islamic Civilization (4)
- HIS 355 - Modern Middle East (4)
- HIS 356 - Early East Asia (4)
- HIS 360 - Modern South Asia (4)
- HIS 365 - Modern Japan and Korea (4)
- HIS 368 - Modern China Through Film (4)
- HIS 369 - China in Revolution (4)

## European electives

Select 8 units from the following

- HIS 308 - Early Modern Europe (4)
- HIS 311 - European Intellectual History (4)
- HIS 413 - Nineteenth-Century Europe (4)
- HIS 414 - Twentieth-Century Europe (4)
- HIS 415 - Europe and the World (4)

## American electives

Select 8 units from the following

- HIS 316 - Colonial and Revolutionary America (4)
- HIS 320 - United States History, 1815-1914 (4)
- HIS 370 - California History (4)
- HIS 380 - America in the 1960's (4)
- HIS 425 - United States Since 1914 (4)
- HIS 435 - Asian-American History: 1800 to the Present (4)
- HIS 436 - America in East Asia: 1800 to the Present (4)
- HIS 480 - San Diego Urban History (4)

12 Additional upper-division History units

Choose from any of the courses listed above, below, or from an approved study abroad program.

- HIS 372 - Two Years Before the Mast and the History of Coastal California (2)
- HIS 375 - African Cultures and Histories (3)
- HIS 460 - Internship in History (1-4)
- HIS 475 - Topics in Women's History (WS) (4)
- HIS 484 - Ancient and Medieval Christianity (3)
- HIS 486 - Modern Christianity (3)
- HIS 487 - The Ancient Historians (4)
- HIS 490 - Special Studies in History (1-4)

Total: 40 Units

## Information Systems (Fermanian School of Business), B.S.

### Program Learning Outcomes

Students who complete the program in Information Systems will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
  - a. *Students will be able to speak about their work with precision, clarity and organization*
  - b. *Students will be able to write about their work with precision, clarity and organization*
  - c. *Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.*
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Write correct and robust software.
7. Analyze the interaction between hardware and software.
8. Apply critical thinking, technical and information systems knowledge to solve problems.
9. Understand and create arguments supported by quantitative evidence.
10. Demonstrate knowledge of information systems and be prepared for careers that use information systems, and graduate study in fields related to information systems.

### Lower Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)
- BUS 100 - Introduction to Business (3)
- BUS 201 - Legal Environment of Business (3)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)
- ECO 100 - Survey of Economics (GE) (3)
- MGT 212 - Principles of Management (3)
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)

Total: 34 Units

### Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- CSC 314 - Operating Systems (4)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 373 - Networking and Security (3)
- ISS 403 - Information and Computer Security (3)
- ISS 414 - Data Base Systems and Web Integration (4)
- ISS 472 - Internship in Information Systems (2)
- ISS 481 - Senior Seminar in Information Systems (1)
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Total: 34 Units

Major Total: 68 Units

### Recommended:

- Cross-cultural experience.
- PHL 211 Ethics (GE) (3)
- While not a required class for the major, ISS 324 Software Engineering (4) is recommended.

### Notes:

- MTH144 or MTH164 may substitute for MTH173. MTH144, MTH164 or MTH173 fulfills the General Education Problem Solving requirement.
- ECO101 and ECO102 may substitute for ECO100. ECO100, ECO101 or ECO102 fulfills the General Education Social World requirement.
- PHL211 fulfills the General Education Philosophy requirement.

## **Information Systems (Mathematical, Information, and Computer Science), B.S.**

### **Program Learning Outcomes**

Students who complete the program in Information Systems will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.

3. Demonstrate effective business communication through both written and verbal means.
  - a. *Students will be able to speak about their work with precision, clarity and organization*
  - b. *Students will be able to write about their work with precision, clarity and organization*
  - c. *Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.*
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Write correct and robust software.
7. Analyze the interaction between hardware and software.
8. Apply their technical knowledge and critical thinking to solve problems.
9. Understand and create arguments supported by quantitative evidence.
10. Demonstrate knowledge of information systems and be prepared for careers that use information systems, and graduate study in fields related to information systems.

## Lower Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)
- BUS 100 - Introduction to Business (3)
- BUS 201 - Legal Environment of Business (3)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)
- ECO 100 - Survey of Economics (GE) (3)
- MGT 212 - Principles of Management (3)
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)

Total: 34 Units

## Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- CSC 314 - Operating Systems (4)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 373 - Networking and Security (3)
- ISS 403 - Information and Computer Security (3)
- ISS 414 - Data Base Systems and Web Integration (4)
- ISS 472 - Internship in Information Systems (2)
- ISS 481 - Senior Seminar in Information Systems (1)
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Total: 34 Units

Major Total: 68 Units

Recommended:

- Cross-cultural experience
- ISS 392 - Topics in Cyber Security (2)
- PHL 211 (GE) (3)
- CSC 323 Software Engineering (3)

Notes:

- MTH144 or MTH164 may substitute for MTH173. MTH144, MTH164 or MTH173 fulfills the General Education Problem Solving requirement.
- ECO101 and ECO102 may substitute for ECO100. ECO100, ECO101 or ECO102 fulfills the General Education Social World requirement.
- PHL211 fulfills the General Education Philosophy requirement.

## Instrumental Performance, Bachelor of Music

### Program Learning Outcomes

*Students who complete the program in Instrumental Performance will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

### Core Curriculum

*(Required of all Music majors)*

Applied:

- MUA 101 - Recital Attendance - 4 semesters (0) - 4 semesters
- MUA 201 - Piano Proficiency Exam (0)
- MUA 212 - Beginning Conducting (2)
- *Applied Music in major performing area (4)*
- *One-unit Ensembles (4)*

Music History:

- MUH 101 - Introduction to Listening (GE) (2)
- MUH 331 - Music History and Literature I (2)
- MUH 332 - Music History and Literature II (2)
- MUH 334 - World Music (2)
- MUH 431 - Faith, Life, and Music (2)

### Music Theory:

- MUT 120 - Music Theory I (4)
- MUT 121 - Music Theory II (4)
- MUT 220 - Music Theory III (3)

Total: 31 Units

### Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 101 - Recital Attendance - 4 semesters (0)
- MUA 313 - Instrumental Conducting (2)
- MUA 376 - Junior Recital (0)
- MUA 476 - Senior Recital (0)
- *Applied Music in major performance area (12)*
- MUE 312 - Instrumental Pedagogy (2)
- MUE 451 - Internship in Music (2)
- MUH 312 - Instrumental Literature (2)
- MUH 333 - Music History and Literature III (2)
- MUP 339 - Small Ensemble (1/2) **4 Units required**
- *One-unit Ensembles (4)*
- *Upper-division Theory (6)*
- *Music Electives (11)*

Total: 47 Units

## **International Development, B.S. Business Administration**

### Program Learning Outcomes

Students who complete the program in International Development will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate an in-depth knowledge of International Development theories and concepts.
7. Compare and contrast approaches to decision making in for-profit and non-profit environments.

- Evaluate the similarities and differences of the economic conditions between developed and developing countries.

## Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
  
- MTH 153 - Mathematical Analysis for Business and Economics (3) *Or*
- MTH 173 - Business Calculus (GE) (3)
  
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 28 Units

## Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 475 - Sustainability in Action (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required**
- ECO 315 - Theories of Economic Development (3)
- ECO 450 - History of Economic Thought (3)
- FIN 335 - Business Finance (3)
- MGT 412 - Leadership Theory and Practice (3)
- MGT 470 - Nonprofit Organization Management (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Choose One Course From the Following:

- ECO 380 - Money and Banking (3)
- ECO 410 - International Economics (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- ECO 460 - Applied Econometrics (3)
- ECO 490 - Special Studies in Economics (3)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- MGT 382 - Applied Entrepreneurship (3)
- POL 301 - Transitions to Democracy (4)
- POL 370 - Comparative Politics (4)
- POL 420 - United States Foreign Policy (4)

- POL 435 - Global Governance (4)
- SOC 360 - Race and Ethnicity (3)
- SOC 444 - Globalization and Culture (3)

Total: 36-37 Units

### Required Off Campus Program

- A Fermanian School of Business approved semester or summer study abroad in a developing country or an approved three (3) unit internship in a developing country is required.

Major Total: 64-65 Units

### Recommended

- PHL 211 - Ethics (GE) (3)

### Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## International Studies, B.A.

### Program Learning Outcomes

*Students who graduate with a degree in International Studies will be able to:*

1. Recognize and appreciate the historical, political, social, cultural, and economic dimensions of international processes and issues.
2. Critically analyze issues of global significance using knowledge and techniques from more than one academic discipline (e.g. political science, history, geography, economics, sociology, literature, etc.)
3. Make informed, reasoned, and ethical judgments in matters relating to issues of international public action.
4. Demonstrate a sense of global awareness, by critically evaluating his or her own culture and society in a global and comparative context.

### Concentrations

- |                                      |                 |
|--------------------------------------|-----------------|
| • Peace Studies                      | • Asia          |
| • Europe                             | • Latin America |
| • Middle East                        | • Africa        |
| • Russia and the Former Soviet Union |                 |

### Lower-Division Requirements

- POL 230 - Introduction to International Relations (4)
- POL 270 - Scope and Methods of Political Science (4)
- POL 290 - World Regional Geography (3)
- ECO 101 - Principles of Macroeconomics (GE) (3) \*

Total: 14 Units

### Upper-Division Core Requirements

- POL 370 - Comparative Politics (4)
- POL 415 - Women and Politics (WS) (4)
- POL 435 - Global Governance (4)
- POL 450 - Issues of Global Human Rights (2)
- POL 460 - Internship in Political Science (2-4) (3) **Units required**
- HIS 415 - Europe and the World (4)

Note(s):

*\*Requirement in general education*

### Off-Campus Cooperative Program (OCP) or World Capitals

Students must enroll in either an approved Off-Campus Cooperative Program or World Capitals program. Acceptable programs must involve a significant period of study outside of the United States. The International Studies advisor in the Department of History and Political Science makes the final determination on acceptable programs.

- POL 391 - World Capitals Program (3-12)

Electives: 8 units from the following (not counted toward concentration)

- POL 301 - Transitions to Democracy (4)
- POL 351 - War and Peace Studies (4)
- POL 420 - United States Foreign Policy (4)
- POL 438 - International Law (4)
- POL 442 - Contemporary Issues in World Politics (4)
- POL 444 - Contemporary Political Ideologies (4)
- POL 455 - Protest and Social Movements in World Politics (4)
- HIS 340 - Russia to 1900 (4)
- HIS 342 - Twentieth-Century Russia and the Soviet Union (4)
- HIS 350 - Islamic Civilization (4)
- HIS 355 - Modern Middle East (4)
- HIS 356 - Early East Asia (4)
- HIS 360 - Modern South Asia (4)
- HIS 365 - Modern Japan and Korea (4)
- HIS 369 - China in Revolution (4)
- HIS 375 - African Cultures and Histories (3)
- HIS 414 - Twentieth-Century Europe (4)

- ECO 315 - Theories of Economic Development **(3)**
- ECO 410 - International Economics **(3)** \*
- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- SOC 350 - Urban Sociology **(3)** \*
- SOC 420 - Social Change **(3)** \*

Note(s):

*\*These courses have prerequisites and may increase the total number of units needed for the major.*

## Concentrations: 8 Units

Students must declare a concentration in either Peace Studies or a Geographic Region. Students may also complete an individualized concentration consisting of 8 units of relevant coursework and an approved Off-campus Cooperative Program (OCP). Many OCPs have relevant coursework that will meet the concentration requirements with the advisor's approval. Individualized concentrations must be approved by the Department of History and Political Science.

### Peace Studies

- POL 351 - War and Peace Studies **(4)**
- POL 455 - Protest and Social Movements in World Politics **(4)**

### Europe

- HIS 413 - Nineteenth-Century Europe **(4)**
- HIS 414 - Twentieth-Century Europe **(4)**

### Middle East

- HIS 350 - Islamic Civilization **(4)**
- HIS 355 - Modern Middle East **(4)**

### Russia and the Former Soviet Union

- HIS 340 - Russia to 1900 **(4)**
- HIS 342 - Twentieth-Century Russia and the Soviet Union **(4)**

### Asia

Eight units from:

- HIS 360 - Modern South Asia **(4)**
- HIS 365 - Modern Japan and Korea **(4)**
- HIS 369 - China in Revolution **(4)**

### Latin America

Coursework for concentration available through Off-campus Cooperative Programs.

## Africa

Coursework for concentration available through Off-campus Cooperative Programs.

Total: 51 Units

## Literature, B.A.

### Concentrations

- Literature
- English Education

### Program Learning Outcomes

**Students who complete the program in Literature - Concentrations in Literature and English Education will be able to:**

1. Integrate their literature studies with ongoing reflection and hospitable engagement with a diverse world.
2. Identify and articulate characteristics and trends of diverse literatures and historical periods: dates, styles, authors, and canon formation.
3. Develop and support close readings of texts using literary theory and terminology.
4. Articulate the difference between a traditional pedagogical and a modern linguistics notion of language.
5. Employ strong research, rhetorical, literary, and analytical skills in their writing.
6. Present literary analysis to formal audiences, demonstrating strategies for audience engagement and oral communication of written work.

### Concentrations

#### Literature

#### Lower-Division Requirements

- LIT 250 - Introduction to the Study of Literature (3)
- LIT 252 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 254 - British Writers I (3)
- LIT 255 - British Writers II (3)
- LIT 256 - American Writers I (3)
- LIT 257 - American Writers II (3)

Total Lower Division Units: 18

#### Upper-Division Requirements

- LIT 400 - American Literature to 1900 (3)

- LIT 448 - Postcolonial Classics and Theory (3)
- LIT 450 - The Novel (3)
- LIT 461 - Shakespeare (3)
- LIT 495 - Literary Theory and Scholarship (3)

One course from the following:

- LIN 312 - Introduction to Linguistics (3)
- LIN 365 - English Grammar and Usage (3)

One course from the following:

- LIT 350 - World Literature (GE) (3)
- LIT 351 - World Cinema (GE) (3)

One course from the following:

- LIT 352 - Diverse Voices in American Literature (GE) (3)
- LIT 353 - Women Writers (GE) (3)

One course from the following:

- LIT 420 - American Literature Since 1900 (3)
- SPA 320 - Mexican American Literature and Culture (3)

Three courses from the following:

- LIT 444 - Medieval Literature (3)
- LIT 445 - 17th Century English Literature (3)
- LIT 446 - Romantic Literature (3)
- LIT 447 - Victorian Literature (3)

Total Upper Division Units: 36

Total Major: 54 Units

## English Education

### Lower-Division Requirements

- LIT 250 - Introduction to the Study of Literature (3)
- LIT 252 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 254 - British Writers I (3)
- LIT 255 - British Writers II (3)
- LIT 256 - American Writers I (3)
- LIT 257 - American Writers II (3)

**Choose one course from:**

- WRI 220 - Introduction to Creative Writing (3)
- JRN 250 - Introduction to Journalism (3)

Total Lower Division Units: 21

**Upper-Division Requirements**

- LIN 312 - Introduction to Linguistics (3)
- LIN 365 - English Grammar and Usage (3)
- LIT 448 - Postcolonial Classics and Theory (3)
- LIT 450 - The Novel (3)
- LIT 461 - Shakespeare (3)
- LIT 495 - Literary Theory and Scholarship (3)
- WRI 315 - Advanced English Composition (3)
- WRI 370 - Writing Theory and Pedagogy (2)

One course from the following:

- LIT 400 - American Literature to 1900 (3)
- LIT 420 - American Literature Since 1900 (3)
- SPA 320 - Mexican American Literature and Culture (3)

One course from the following:

- LIT 444 - Medieval Literature (3)
- LIT 445 - 17th Century English Literature (3)

One course from the following:

- LIT 446 - Romantic Literature (3)
- LIT 447 - Victorian Literature (3)

Total Upper Division Units: 32

Total Major: 53 Units

**Teacher Preparation**

To complete requirements for a preliminary Single Subject (Secondary) California teaching credential, students who pursue the concentration in English Education must pass the CSET Examination in English (including Composition and Rhetoric, Literature, and Linguistics) to demonstrate Subject Matter Competency and complete the Professional Preparation coursework and other items as required by the commission on Teacher Credentialing (CTC).

**Management, B.S. Business Administration**

This major is diversified with the required choice of a concentration in Entrepreneurship, Global Business, or Nonprofit Management as specified below.

## Program Learning Outcomes

Students who complete the program in Management will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate an in-depth knowledge of management theory.
7. Apply management theories to effectively address challenging business scenarios.

## Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
  
- MTH 153 - Mathematical Analysis for Business and Economics (3) *Or*
- MTH 173 - Business Calculus (GE) (3)
  
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 28 Units

## Upper-Division Requirement

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required**
- FIN 335 - Business Finance (3)
- MGT 320 - Organizational Behavior (3)
- MGT 374 - Human Resource Management (3)
- MGT 484 - Operations Management (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Choose one (1) course:

- MGT 412 - Leadership Theory and Practice (3)

- MGT 416 - Perspectives on Leadership (3)

## Choose a Required Concentration

### Entrepreneurship

- MGT 381 - Creativity and Innovation (3)
- MGT 382 - Applied Entrepreneurship (3)

### Global Business

**Choose two (2) courses from the following (at least one (1) course must be ECO410 or FIN435):**

- ECO 410 - International Economics (3)
- FIN 435 - International Finance (3)
- POL 370 - Comparative Politics (4)
- POL 435 - Global Governance (4)
- SOC 444 - Globalization and Culture (3)

### Off-Campus Program

Required: approved semester study abroad

### Nonprofit Management

- BUS 475 - Sustainability in Action (3)
- MGT 470 - Nonprofit Organization Management (3)

Total: 36-37 Units

Major Total: 64-65 Units

### Recommended

- PHL 211 - Ethics (GE) (3)

### Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## **Managerial and Organizational Communication, B.A.**

### Program Learning Outcomes

**Students who complete the program in Managerial and Organizational Communication will be able to:**

1. Develop a sophisticated understanding of communication as the negotiation of meaning.
2. Display communication competence both verbally and nonverbally in interpersonal, small group, organizational, and intercultural contexts.
3. Formulate a thesis, organize a complex idea, and support it with appropriate evidence using proper grammar and punctuation.
4. Demonstrate an ability to present themselves in a professional manner including resume, interview skills, and presentations.
5. Demonstrate an understanding and ability to work collaboratively in a group.
6. Analyze and conduct original communication research (quantitative and qualitative) using scholarly journals, data bases, and collecting and analyzing empirical data.
7. Demonstrate an understanding of basic theoretical concepts relative to organizational behavior including scientific management, systems theory, and organizational culture.
8. Integrate a Christian perspective of values and ethics in their communication in interpersonal, small group organizational and intercultural contexts.
9. Develop an awareness of multiple approaches to leadership and develop a personal leadership philosophy.

## Lower-Division Core Requirements

- COM 190 - Interpersonal Communication (3)
- COM 220 - Small Group Communication (3)
- COM 265 - Introduction to Empirical Research in Communication (3)
- ACC 200 - Principles of Accounting for Non-Business Majors (3)
  
- ECO 100 - Survey of Economics (GE) (3) \*\*  
OR
- ECO 101 - Principles of Macroeconomics (GE) (3) \*\*  
OR
- ECO 102 - Principles of Microeconomics (GE) (3) \*\*

Lower-division units: 15 units

Note(s):

*\*\*Meets a general education requirement.*

*All majors take COM 100 (3) or COM 231 (3) as an additional general education requirement.*

## Upper-Division Core Requirements

- COM 330 - Persuasion (3)
- COM 340 - Organizational Communication (3)
- COM 345 - Management Communication (3)
- COM 421 - Internship in Communication (3)
- COM 422 - Portfolio Construction (1)
- COM 465 - Communication Theories and Research (3)
- COM 485 - Communication, Values, and Society (2)

Total: 18 Units

Take one (1) course from the following:

- COM 260 - Advanced Public and Professional Speaking (3)
- WRI 365 - Writing for Professional Careers (3)

Take one (1) course from the following:

- COM 390 - Introduction to Public Relations (3)
- COM 450 - Communication Training and Development (2)

Take two (2) courses from the following sixteen (16) options (selections must include at least 2 different courses AND 6 units total):

- COM 365 - Intercultural Communication (3)
- COM 490 - Special Studies in Communication (1-3) **3 Units required**
- COM 492 - Independent Study (1-3)
- BUS 340 - Real Estate Principles and Practices (3)
- BUS 475 - Sustainability in Action (3)
- BUS 480 - International Business (3)
- FIN 335 - Business Finance (3)
- FIN 415 - Investments (3)
- MKT 332 - Principles of Marketing (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)
- MGT 374 - Human Resource Management (3)
- MGT 382 - Applied Entrepreneurship (3)
- MGT 470 - Nonprofit Organization Management (3)
- HON 498 - Honors Project I (2) **AND**
- HON 499 - Honors Project II (1) (counts as one course)

Upper-Division Units: 29-30

Total Units Required for Major: 45-46 \*

*\*Depending on specific courses selected and not including units counted toward general education requirements.*

*+The BA in Managerial and Organizational Communication is an approved program under PLNU's WASC Regional Accreditation. Since it is not a business major, it is not an Accreditation Council for Business Schools and Programs (ACBSP) approved program.*

## **Marketing, B.S. Business Administration**

### **Program Learning Outcomes**

Students who complete the program in Marketing will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.

2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate in-depth knowledge of marketing theory and concepts.
7. Apply marketing research skills to inform marketing decision making.
8. Develop, analyze, and evaluate strategic and tactical marketing plans and programs, and assess marketing performance.

## Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
  
- MTH 153 - Mathematical Analysis for Business and Economics (3) *Or*
- MTH 173 - Business Calculus (GE) (3)
  
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 28 Units

## Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required**
- FIN 335 - Business Finance (3)
- MKT 332 - Principles of Marketing (3)
- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)
- MKT 350 - Social Media and Digital Marketing (3)
- MKT 432 - Marketing Research (3)
- MKT 460 - Marketing Strategy (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)

Total: 36 Units

Major Total: 64 Units

Recommended

Cross-cultural experience

- PHL 211 - Ethics (GE) (3)

Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## **Mathematics, B.A.**

### Program Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.
11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

### Lower-Division Requirements

- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 233 - Linear Algebra (3)
- MTH 242 - Number Theory with Proofs (2)
- MTH 274 - Calculus III (4)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)

Total Lower Division Units: 24 (20 non-GE units)

### Upper-Division Requirements

- MTH 352 - History of Mathematics (2)
- MTH 383 - Mathematical Probability and Statistics (3)
- MTH 481 - Senior Seminar in Mathematics (1)

Choose one course from:

- MTH 424 - Real Analysis (4)
- MTH 444 - Abstract Algebra (4)

Choose one course from:

- MTH 333 - Differential Equations (3)
- MTH 343 - Discrete Mathematics (3)
- MTH 373 - Mathematical Modeling (3)
- MTH 413 - Complex Analysis (3)

Choose one sequence from:

- MTH 495 - Service Learning in Mathematics (3)
- MTH 498 - Independent Research in Mathematics I (2) *AND*
- MTH 499 - Independent Research in Mathematics II (1)
- HON 498 - Honors Project I (2) *AND*
- HON 499 - Honors Project II (1)

Eight additional elective units from:

- MTH 333 - Differential Equations (3)
- MTH 343 - Discrete Mathematics (3)
- MTH 373 - Mathematical Modeling (3)
- MTH 402 - Topics in Geometry (2)
- MTH 413 - Complex Analysis (3)
- MTH 424 - Real Analysis (4)
- MTH 444 - Abstract Algebra (4)
- MTH 471 - History of Mathematics Study Tour (1)
- MTH 491 - Independent Study in Mathematics (1-4)
- MTH 492 - Special Topics in Mathematics (2)
- MTH 495 - Service Learning in Mathematics (3)
- MTH 498 - Independent Research in Mathematics I (2)
- MTH 499 - Independent Research in Mathematics II (1)
- CSC 311 - R for Computational Science (1)
- ECO 460 - Applied Econometrics (3)
- HON 498 - Honors Project I (2)
- HON 499 - Honors Project II (1)

Total: 8 Units

Total Non-GE Units: 44

Note(s):

*An elective class may not count as both upper-division core and a required "additional elective."*

# Mathematics, B.S.

## Program Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.
11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

## Lower-Division Requirements

- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 233 - Linear Algebra (3)
- MTH 242 - Number Theory with Proofs (2)
- MTH 274 - Calculus III (4)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)
- PHY 241 - University Physics I (GE) (4)

Total: 30 Units (22 non-GE units)

## Upper-Division Requirements

- MTH 333 - Differential Equations (3)
- MTH 352 - History of Mathematics (2)
- MTH 383 - Mathematical Probability and Statistics (3)
- MTH 424 - Real Analysis (4)
- MTH 444 - Abstract Algebra (4)
- MTH 481 - Senior Seminar in Mathematics (1)
- MTH 492 - Special Topics in Mathematics (2)

Choose two courses from:

- MTH 343 - Discrete Mathematics (3)
- MTH 373 - Mathematical Modeling (3)

- MTH 413 - Complex Analysis (3)

Choose one sequence from:

- MTH 495 - Service Learning in Mathematics (3)
- MTH 498 - Independent Research in Mathematics I (2) *AND*
- MTH 499 - Independent Research in Mathematics II (1)
- HON 498 - Honors Project I (2) *AND*
- HON 499 - Honors Project II (1)

Five (5) additional elective units from:

- MTH 343 - Discrete Mathematics (3)
- MTH 373 - Mathematical Modeling (3)
- MTH 402 - Topics in Geometry (2)
- MTH 413 - Complex Analysis (3)
- MTH 471 - History of Mathematics Study Tour (1)
- MTH 491 - Independent Study in Mathematics (1-4)
- MTH 492 - Special Topics in Mathematics (2)
- MTH 495 - Service Learning in Mathematics (3)
- MTH 498 - Independent Research in Mathematics I (2)
- MTH 499 - Independent Research in Mathematics II (1)
- ECO 460 - Applied Econometrics (3)
- CSC 311 - R for Computational Science (1)
- HON 498 - Honors Project I (2)
- HON 499 - Honors Project II (1)

Total: 36 Units

Note(s):

*An elective class may not count as both upper-division core and a required "additional elective."*

Total non-GE units: 58

Recommended Electives for Mathematics Tracks:

**Graduate School:** One semester of independent study continuing Abstract Algebra or Real Analysis, Complex Analysis, Honors Project or Independent Research in Mathematics.

**Teaching:** To prepare for the State of California exams necessary for obtaining a single subject credential in mathematics: Topics in Geometry, Mathematical Probability, Discrete Mathematics, Complex Analysis and EDU 433 (3) Methods for Teaching Secondary Mathematics. In addition, EDU 302 - Foundations of Education and Learning Theory and EDU 404 - Foundations of Special Education can be taken as an undergraduate preparation for taking graduate classes for a teaching credential.

**Industry:** Complex Analysis, Mathematical Probability, and Mathematical Modeling. Additional knowledge of computer programming and software tools such as Matlab and R can be helpful in this field.

**Actuary:** MTH 383 Mathematical Probability and Statistics, MTH 343 Discrete Mathematics, MTH 373 Mathematical Modeling will help you prepare for actuarial exams. We recommend that you take the first exam as soon as you finish MTH 383 . The Society of Actuaries has also approved:

ECO 101 Macroeconomics, ECO 102 Microeconomics to meet their economics requirement (you must get at least a B in each). The Society of Actuaries has also approved the sequence: ACC 200 ( ACC 201 Principles of Financial Accounting I can be substituted), FIN 335 Business Finance and FIN 385 Intermediate Finance to meet their finance requirement. So with some work you can meet 3 of the 10 items required for becoming a Fellow of the Society of Actuaries before you graduate from college. It is also worth noting that by adding a few classes to this list, you can earn a minor in Finance.

## **Media Communication, B.A.**

### Concentrations

- Multimedia
- Performance
- Production
- Film Studies

### Program Learning Outcomes

**Students who complete the program in Media Communication will be able to:**

1. Demonstrate skills in the theoretical and/or historical critique of media. This includes the integration of a Christian worldview and ethical framework for viewing, interpreting, and critiquing media messages.
2. Demonstrate scriptwriting skills for radio, TV, film, internet, church media, and/or corporate media industries.
3. Demonstrate production and/or performance skills in radio, TV, film, internet, church media, and/or corporate media industries.
4. Demonstrate professional socialization skills in a radio, TV, film, internet, church media, and/or corporate media internship.

### Lower-Division Core Requirements

- COM 150 - Introduction to Media Communication (3)
- COM 175 - Scriptwriting for Television and Film (3)
- COM 195 - Media Literacy (3)
- COM 243 - Introduction to TV and Film Production (3)
- COM 275 - Audio Production (2)
  
- JRN 215 - Newspaper Workshop (1) **OR**
- WRI 216 - Literary Magazine Workshop (1) **OR**
- JRN 217 - Yearbook Workshop (1)

Total: 15 Units

### Upper-Division Core Requirements

- COM 421 - Internship in Communication (3)  
*(Not required for the Film Studies concentration)*
- COM 422 - Portfolio Construction (1)
- COM 465 - Communication Theories and Research (3)
- COM 485 - Communication, Values, and Society (2)

Total: 9 Units

## Upper-Division Electives

Choose nine (9) units from:

- COM 300 - Narrative and Documentary Film (3)
- COM 340 - Organizational Communication (3)
- COM 350 - Electronic Media in Communication (3)
- COM 390 - Introduction to Public Relations (3)
- COM 490 - Special Studies in Communication (1-3)
- JRN 340 - Media Law and Ethics (3) \*

Students with a Film Studies concentration may also select the following two courses:

- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)

Total: 9 Units

## Writing Electives

Choose one (1) course from:

- WRI 220 - Introduction to Creative Writing (3)
- JRN 250 - Introduction to Journalism (3)
- WRI 322 - Creative Writing: Fiction (3)
- WRI 323 - Creative Writing: Creative Nonfiction (3)

Total: 3 Units

## Concentrations

**Choose one track and select electives among the choices.** To complete the major, there must be a minimum of 24 upper division units between the core and concentration.

## Multimedia

Take a total of 8 units from:

- COM 420 - Communication Practicum II (1-2)
- ART 103 - Two-Dimensional Design (3)
- ART 202 - Introduction to Computer Graphics (3)
- ART 315 - Introduction to Interactive Web Design (3)
- ART 450 - Interactive Web Design (3)

Total: 8 Units

## Performance

Take a total of 8 units from:

- COM 231 - Argumentation and Debate (GE) (3)
- COM 260 - Advanced Public and Professional Speaking (3)
- COM 313 - Television News Production (3)
- COM 420 - Communication Practicum II (1-2) **1 Unit required**
- COM 425 - Advanced Television Workshop (1)
- COM 435 - Advanced Audio Production (1)
- TRE 250 - Voice and Diction (2)
- TRE 270 - Acting I (3)

Total: 8 Units

## Production

Take a total of 8 units from:

- COM 313 - Television News Production (3)
- COM 420 - Communication Practicum II (1-2)
- COM 425 - Advanced Television Workshop (1)
- COM 435 - Advanced Audio Production (1)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)
- TRE 436 - Stagecraft Techniques (2)
- TRE 437 - Lighting and Makeup Techniques (2)

Total: 8 Units

## Film Studies

*NOTE: Student must be accepted into the LAFSC program in order to complete this concentration.*

- COM 470 - Hollywood Production Workshop (4)
- COM 471 - Faith and Artistic Development in Film (3)
- COM 472 - Internship: Inside Hollywood (3/6) **6 Units required**

Choose one of the following:

- COM 371 - Professional Acting for the Camera (3)
- COM 473 - Narrative Storytelling (3)
- COM 474 - Professional Screenwriting (3)
- COM 480 - Independent Study (3)

Total: 16 Units (taken at LAFSC)

## **Multimedia Journalism, B.A.**

### Program Learning Outcomes

**Students who complete the program in Multimedia Journalism will be able to:**

1. Exhibit effective research and reporting practices including the creation and editing of a news story based on accepted industry standards and values.
2. Display strong interpretive, analytic, and critical thinking skills by writing news copy clearly and accurately, demonstrating quantitative and qualitative reasoning in forms appropriate to the purpose, medium, and audience.
3. Identify and apply appropriate ethical and legal standards in their service to their communities and cultures.
4. Employ delivery skills appropriate to various news performance situations.
5. Describe how technologies shape the way people perceive and interact with the world and apply these digital tools and technologies appropriately for the communications professions in which they work.

### Lower-Division Requirements

- JRN 215 - Newspaper Workshop (1) \*
- JRN 250 - Introduction to Journalism (3)
- COM 150 - Introduction to Media Communication (3)
- COM 243 - Introduction to TV and Film Production (3)

One course from the following:

- LIT 252 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 254 - British Writers I (3)
- LIT 255 - British Writers II (3)
- LIT 256 - American Writers I (3)
- LIT 257 - American Writers II (3)

Total: 15 Units

Note(s):

*\* Three units of Newspaper Workshop. WRI 216, JRN 217, JRN 218, or COM 275 may substitute for two of those units.*

### Upper-Division Requirements

- JRN 314 - Computer-Assisted Reporting (3)
- JRN 340 - Media Law and Ethics (3)
- JRN 350 - Special Topics in Journalism (3)
- JRN 430 - Multimedia Journalism (3)
- JRN 470 - Internship in Journalism (2)
- JRN 495 - Senior Seminar in Multimedia Journalism (3)
- **One additional upper-division literature course beyond GE from the courses listed under Literature, Spanish, or French.**

Total: 20 Units

Choose One Concentration:

### Concentration in Writing

- JRN 310 - Advanced Reporting (3)
  - JRN 345 - Editing (3)
  - JRN 440 - Magazine Editing and Concepts (3)
- Choose one course from the following:**
- WRI 315 - Advanced English Composition (3)
  - WRI 321 - Creative Writing: Poetry (3)
  - WRI 322 - Creative Writing: Fiction (3)
  - WRI 323 - Creative Writing: Creative Nonfiction (3)

Total: 12 Units

### Concentration in Visual Storytelling

- JRN 312 - Television News Writing (3)
- JRN 313 - Television News Production (3)
- JRN 413 - Advanced Television News Production (3)
- JRN 414 - Long-Form Broadcast News (3)
- JRN 425 - Advanced Television Workshop (1)

Total: 13 Units

Major Total: 47-48 Units

### Multimedia Journalism Major with a Minor in Spanish

The Department offers a Multimedia Journalism major with a Spanish Minor. This extremely marketable and desirable combination is recommended for Multimedia Journalism majors who desire to work in American border cities or in Latin American countries, as well as for students seeking a Single-Subject Teaching Credential. The student completes an internship at a bilingual newspaper, magazine, radio, or television station. A maximum of two of the required upper-division literature courses in the Multimedia Journalism major may be in Spanish or Latin American literature.

# Music Education, B.A.

## Program Learning Outcomes

Students who complete the program in Music Education will be able to:

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Develop a broad conceptual understanding of music learning in elementary and secondary schools settings and pedagogical methods appropriate to each level.
6. Develop more advance applied music skills in a principal performance area.

## Core Curriculum

*(Required of all Music majors)*

### Applied:

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**
- MUH 334 - World Music **(2)**
- MUH 431 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 120 - Music Theory I **(4)**
- MUT 121 - Music Theory II **(4)**
- MUT 220 - Music Theory III **(3)**

Total: 31 Units

## Requirements

**The following courses are required in addition to the Core Curriculum indicated above:**

- MUE 201 - Woodwind Instruments (1)
- MUE 202 - Brass Instruments (1)
- MUE 203 - Percussion Instruments (1)
- MUE 204 - String Instruments (1)
- MUE 303 - Choral and Vocal Techniques (2)
- MUE 441 - Elementary School Music Methods (3)
- MUE 454 - Secondary School Music Methods (3)
- MUH 333 - Music History and Literature III (2)
- MUA 101 - Recital Attendance - 4 semesters (0)
- MUA 312 - Choral Conducting and Literature (2)
- MUA 313 - Instrumental Conducting (2)
- MUA 376 - Junior Recital (0)
- *Applied Music in major performing area (4)*
- *Voice (class or private) (2)*
- *One-unit Ensembles (4)*
- Upper Division MUT (3)
- Music Electives (2)

**Total: 33 Units**

**Note(s):**

Additional requirements for the California Teaching Credential are listed in the School of Education under the Single-Subject credential. The Teaching Credential requires an extra year after the B.A. degree is earned.

## **Music with a Concentration in Music and Ministry, B.A.**

### **Program Learning Outcomes**

**Students who complete the program in Music with a Concentration in Music and Ministry will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate substantial knowledge of the traditions, techniques and materials used in worship music.
6. Complete a semester-long internship where students are placed in church music ministry settings, and given leadership responsibilities with the support of a professional music staff member.

### **Core Curriculum**

*(Required of all Music majors)*

## Applied:

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

## Music History:

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**
- MUH 334 - World Music **(2)**
- MUH 431 - Faith, Life, and Music **(2)**

## Music Theory:

- MUT 120 - Music Theory I **(4)**
- MUT 121 - Music Theory II **(4)**
- MUT 220 - Music Theory III **(3)**

Total: 31 Units

## Requirements

**The following courses are required in addition to the Core Curriculum indicated above:**

- CMU 201 - Instruments in Worship **(2)**
- CMU 202 - Multi-Media for Worship Ministry **(2)**
- CMU 314 - Music and Worship **(3)**
- CMU 315 - Church Music Administration and Materials **(2)**
- CMU 433 - Hymnology **(3)**
- CMU 451 - Internship in Church Music **(2)**
- MUA 312 - Choral Conducting and Literature **(2)**
- MUH 333 - Music History and Literature III **(2)**

Total: 16 Units

## Note(s):

**A minor from the following list is recommended:**

Youth Ministry, Theatre, Communication, or Media Communication

**Music, B.A.**

## Program Learning Outcomes

*Students who complete the program in Music will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.

## Core Curriculum

*(Required of all Music majors)*

### Applied:

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**
- MUH 334 - World Music **(2)**
- MUH 431 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 120 - Music Theory I **(4)**
- MUT 121 - Music Theory II **(4)**
- MUT 220 - Music Theory III **(3)**

Total: 31 Units

## Requirements

**In addition to the Core Curriculum Requirements Above:**

- **Choose 2 units of upper division MUH chosen from: MUH309, 310, 311, 312 or 333 (2)**
- **Choose 2 units from upper division MUE OR any two from MUE201, 202, 203 and 204 (2)**
- **AND an additional 13 units of which 7 must be Upper Division (13)**

Total: 17 Units

Note(s):

*A minor from the following list is recommended:*

Theatre, Media Communication, or Business Administration

## **Nursing, B.S.N.**

### Program Learning Outcomes

**INQUIRING FAITHFULLY:** The student will demonstrate knowledge, skill and behavior of the evidence-based practice of nursing which integrates growth in reasoning, analysis, decision-making and the application of theory with the goal of advocating for others and/or self. This includes holistic nursing skills and the nursing process.

**LEADING FAITHFULLY:** The student will incorporate a foundational relationship with Christ and others and embrace a willingness to serve others in the midst of life circumstances (e.g., illness, injustice, poverty). The student will role-model the need for “Sabbath Rest” as a means of personal renewal, and true care of the self, so that service to others is optimally achieved. The student will incorporate the characteristics of a servant leader including: humility, courage, forgiveness, discernment.

**COMMUNICATING FAITHFULLY:** This student will actively engage in the dynamic interactive process that is intrapersonal and interpersonal with the goal of advocating for others and/or self. This includes effective, culturally appropriate communication which conveys information, thoughts, actions and feelings through the use of verbal and nonverbal skills.

**FOLLOWING FAITHFULLY** As defined as claiming the challenge from Florence Nightingale that nursing is a “divine imposed duty of ordinary work.” The nursing student will integrate the ordinary work by complying with and adhering to regulatory and professional standards (e.g. ANA Code of Ethics, the California Board of Registered Nursing, Scope of Nursing Practice, SON Handbook). This includes taking responsibility, being accountable for all actions and treating others with respect and dignity.

**CARING FAITHFULLY:** The student will embrace a calling to the ministry of compassionate care for all people in response to God’s grace, which aims to foster optimal health and bring comfort in suffering and death.

### Lower-Division Requirements

- NSG 150 - Caring Faithfully: An Introduction to Nursing (2) \*
- NSG 250 - Nursing of Individuals: Adult Health I (4)
- NSG 251 - Nursing of Individuals: Clinical Practicum I (3)
- NSG 260 - Nursing of Individuals: Adult Health II (4)
- NSG 261 - Nursing of Individuals: Clinical Practicum II (3)
- NSG 270 - Pharmacology in Nursing (2)
- BIO 130 - Human Anatomy and Physiology I (GE) (4) \*
- BIO 140 - Human Anatomy and Physiology II (4) \*
- BIO 220 - Microbiology of Infectious Diseases (4) †
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) \*
- FCS 150 - Human Development (3) ††
- FCS 225 - Fundamentals of Nutrition (3) ††

- MTH 203 - Introduction to Statistics (3)
- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3) \*

Select 3-4 General Education units from The Social World

Total: 52 Units

Note(s):

*\*Prerequisite to Nursing program, i.e., admission to NSG 250 and NSG 251.*

*†May be allowed to complete concurrent with first Nursing course.*

*††Must be completed by the end of the sophomore year.*

*A grade of at least "B" in NSG 150 and a minimum GPA of 3.0 in all pre-requisite and nursing courses are required for the major in Nursing in order to progress to the next course or level.*

## Upper-Division Requirements

- NSG 310 - Nursing of Families: Child/Adolescent Focus (2)
- NSG 311 - Nursing of Families: Child/Adolescent Clinical Practicum (3)
- NSG 330 - Nursing of Families: The Childbearing Process (2)
- NSG 331 - Nursing of Families: The Childbearing Process Clinical Practicum (3)
- NSG 340 - Nursing of Families: Adult Health III (2)
- NSG 341 - Nursing of Families: Adult Health III Clinical Practicum (3)
- NSG 399 - Nursing Research (2)
- NSG 450 - Nursing of Communities: Mental Health Focus (3)
- NSG 451 - Nursing of Communities: Mental Health Clinical Practicum (3)
- NSG 460 - Nursing of Communities: Community Health Focus (3)
- NSG 461 - Nursing of Communities: Community Health Focus Clinical Practicum (1)
- NSG 470 - Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice (3)
- NSG 480 - Nursing Capstone (1)
- NSG 481 - Nursing Capstone Practicum (3)
- PSY 321 - Abnormal Psychology (3)
- SOC 360 - Race and Ethnicity (3)

Total: 40 Units

## Nutrition and Food, B.A.

### Concentrations

Food Service Management

Nutrition and Health

## Program Learning Outcomes

**Students who complete the program in Nutrition and Food - Concentration in Food Service Management will be able to:**

1. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
2. Examine the role of business, environment, food, and lifestyle trends to develop food service systems to enhance nutrition and wellness in diverse individuals and groups.
3. Understand the food and food systems foundation and apply to the development, modification, and evaluation of recipes, menus, and food products acceptable to diverse groups.
4. Utilize principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation, necessary for the implementation of food and nutrition services in professional settings.
5. Apply management and business theories and principles to the development, marketing, and delivery of programs and services.
6. Demonstrate effective written and interpersonal communication skills.
7. Examine cultural differences in food choices and ethics when working with food service systems that meet the needs of diverse ethnic, religious, and financial backgrounds.
8. Evaluate the effects of societal, cultural, and financial dynamics upon diet trends, dietary choices and food preparation methods among families and societies.
9. Recognize legal and ethical considerations affecting food service organizations.
10. Identify career paths and assess appropriate career plans for identifying professional areas of service in food service management field.

**Students who complete the program in Nutrition and Food - Concentration in Nutrition and Health will be able to:**

1. Demonstrate content knowledge of nutrient needs on growth and development during the lifecycle stages of prenatal through elderly.
2. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
3. Apply content knowledge and develop skills in teaching/counseling nutrition knowledge to individuals or groups.
4. Understand the food and food systems foundation and apply to the development, modification, and evaluation of recipes, menus, and food products acceptable to diverse groups.
5. Utilize principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation, necessary for the implementation of food and nutrition services in professional settings.
6. Analyze, interpret and evaluate current evidence-based research related to nutrition topics.
7. Examine cultural differences in food choices and ethics when working with peoples of diverse ethnic, religious and financial backgrounds.
8. Evaluate the effects of societal, cultural, and financial dynamics upon diet trends, dietary choices, and food preparation methods among families and societies.
9. Identify career paths and assess appropriate career plans for identifying professional areas of nutrition/health fields.

## Lower-Division Requirements

- FCS 101 - Introduction to Family and Consumer Sciences (1)
- FCS 110 - Fundamentals of Food (2)
- FCS 150 - Human Development (3)
- FCS 225 - Fundamentals of Nutrition (3)
- FCS 230 - Personal and Consumer Financial Management (2)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4)
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- PHL 211 - Ethics (GE) (3)

Total: 19 Units

### Upper-Division Requirements

- FCS 300 - Food Economics and Management (2)
- FCS 303 - Cultural Foods (2)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- FCS 435 - Food Service Production and Management (3)
- FCS 480 - Internship in Family and Consumer Sciences (2 or 4) (2) **Units required**
- FCS 497 - Family and Consumer Sciences Senior Seminar (2)

Total: 14 Units

Core Total: 33 Units

### Concentrations

Choose one required concentration from Food Service Management or Nutrition and Health.

#### Food Service Management

##### Lower Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- MGT 212 - Principles of Management (3)

Total: 10 Units

##### Upper Division Requirements

- FCS 445 - Catering (2)
- MGT 382 - Applied Entrepreneurship (3)
- MKT 332 - Principles of Marketing (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)

Total: 14 Units

Major Total: 57 Units

#### Recommended Courses for Food Service Management Concentration:

- BUS 201 - Legal Environment of Business (3)
- BUS 313 - Administrative Communication (3)

- COM 220 - Small Group Communication (3)
- COM 312 - Gender and Communication (WS) (3)
- COM 340 - Organizational Communication (3)
- FCS 250 - Introduction to Family and Consumer Sciences Research (1)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)
- PSY 320 - Social Psychology (3)

## Nutrition and Health

### Lower Division Requirements

- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 140 - Human Anatomy and Physiology II (4)
- SOC 201 - Cultural Anthropology (GE) (3)

Total: 11 Units

### Upper Division Requirements

- COM 340 - Organizational Communication (3)
- FCS 305 - Life Cycle Nutrition (4)
- FCS 330 - Community Nutrition (3)
- FCS 331 - Community Nutrition Practicum (1)
- FCS 414 - Practices in Nutrition Education and Dietary Counseling (2)
- PSY 320 - Social Psychology (3)

Total: 16 Units

Major Total: 60 Units

### Recommended Courses for Nutrition and Food Concentration:

- FCS 250 - Introduction to Family and Consumer Sciences Research (1)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)
- FCS 445 - Catering (2)
- FCS 490 - Special Studies in Family and Consumer Sciences (1-4)
- PSY 325 - Clinical and Community Interventions (4)
- PSY 345 - Group Dynamics (3)

## Philosophy, B.A.

The discipline of philosophy, the critical inquiry into the structure of reality, knowledge, and values, seeks to clarify and explicate the presuppositions and implications of various interpretations of human experience. The purposes of the Philosophy major are:

- To develop critical and creative thinking, soundness of argument, clarity of thought, and precision in expression;

- To cultivate a critical appreciation of the enduring questions constituting the philosophical heritage;
- To explore the relation between philosophical and religious thought; and
- To prepare students for graduate study.

## Program Learning Outcomes

*Students who complete the program in Philosophy will be able to:*

1. Engage in the disciplined practice of asking questions about God, the world, and themselves, including questions for which there may be no easy answers.
2. Differentiate among interrelated movements or figures in the history of philosophy.
3. Evaluate the strengths and weaknesses of human reasoning or experience to provide an adequate account of the human condition, the world, ethics and Christian life.

## Lower-Division Requirements

- PHL 201 - Introduction to Philosophy (GE) (3)  
**OR**
- PHL 211 - Ethics (GE) (3)
- PHL 277 - Logic (3)

Total: 6 Units

## Upper-Division Requirements

- PHL 301 - Plato and Aristotle (3)
- PHL 302 - Descartes through Hegel (3)
- PHL 401 - Contemporary Voices in Philosophy, Theology, and Ethics (3)  
**OR**
- PHL 411 - The Search for Meaning: Goodness, Being, and Truth (3)
- PHL 490 - Special Studies in Philosophy (1-3)
- **Eighteen (18) additional SOTCM upper-division major elective units, 15 of which will need to be upper-division PHL courses.**

Total: 28 Units

Major Total: 34 Units

## Recommended

*Greek, German, or French should be used to fulfill the general education foreign language requirement.*

## **Physics, B.A.**

## Program Learning Outcomes

### Students who complete the Physics B.A. program will:

1. Develop an understanding of the fundamental principles of physics.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

## Core Curriculum

The following courses are required of all Physics and Engineering Physics majors:

- EGR 110 - Computational Methods for Engineers and Scientists I **(1)**
- EGR 120 - Computational Methods for Engineers & Scientists II **(1)**
- PHY 241 - University Physics I (GE) **(4)**
- PHY 242 - University Physics II **(4)**
- PHY 304 - Modern Physics **(4)**
- PHY 341 - Analytical Mechanics **(4)**
- PHY 361 - Electricity, Magnetism, and Waves I **(3)**
- PHY 362 - Electricity, Magnetism, and Waves II **(3)**
- PHY 401 - Thermodynamics **(3)**
- PHY 431 - Quantum Mechanics **(3)**
- PHY 475 - Senior Laboratory and Student Project **(2)**
- PHY 495 - Seminar in Physics **(1)**
- CHE 152 - General Chemistry I (GE) **(4)**
- MTH 164 - Calculus I (GE) **(4)**
- MTH 174 - Calculus II **(4)**
- MTH 274 - Calculus III **(4)**
- MTH 333 - Differential Equations **(3)**

Total: 52 Units

## Recommended

- CSC 143 - Introduction to Computer Programming **(3)**
- CSC 154 - Objects and Elementary Data Structures **(4)**
- MTH 233 - Linear Algebra **(3)**

## Requirements

The following courses are required in addition to the core curriculum to earn a B.A. in Physics:

- CHE 153 - General Chemistry II (4)

One of the following courses:

- PHY 311 - Nuclear Physics (3)
- PHY 443 - Solid State Physics (3)

Total: 7 Units

## **Physics, B.S.**

### Program Learning Outcomes

**Students who complete the Physics B.S. program will:**

1. Develop an understanding of the fundamental principles of physics.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

### Core Curriculum

The following courses are required of all Physics and Engineering Physics majors:

- EGR 110 - Computational Methods for Engineers and Scientists I (1)
- EGR 120 - Computational Methods for Engineers & Scientists II (1)
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)
- PHY 304 - Modern Physics (4)
- PHY 341 - Analytical Mechanics (4)
- PHY 361 - Electricity, Magnetism, and Waves I (3)
- PHY 362 - Electricity, Magnetism, and Waves II (3)
- PHY 401 - Thermodynamics (3)
- PHY 431 - Quantum Mechanics (3)
- PHY 475 - Senior Laboratory and Student Project (2)
- PHY 495 - Seminar in Physics (1)
- CHE 152 - General Chemistry I (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 274 - Calculus III (4)
- MTH 333 - Differential Equations (3)

Total: 52 Units

## Recommended

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- MTH 233 - Linear Algebra (3)

## Requirements

The courses listed below are required in addition to the core curriculum to earn a B.S. degree in Physics.

- PHY 311 - Nuclear Physics (3)
- PHY 362 - Electricity, Magnetism, and Waves II (3)
- PHY 443 - Solid State Physics (3)
- CHE 153 - General Chemistry II (4)

At least four units from the following courses:

- EGR 422 - Digital Electronics (2)
- EGR 432 - Computer Interfacing (2)
- CHE 294 - Organic Chemistry I (4)

Total: 17 Units

## Piano Performance, Bachelor of Music

### Program Learning Outcomes

**Students who complete the program in Piano Performance will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

### Core Curriculum

*(Required of all Music majors)*

Applied:

- MUA 101 - Recital Attendance - 4 semesters (0) - 4 semesters
- MUA 201 - Piano Proficiency Exam (0)

- MUA 212 - Beginning Conducting (2)
- *Applied Music in major performing area* (4)
- *One-unit Ensembles* (4)

### Music History:

- MUH 101 - Introduction to Listening (GE) (2)
- MUH 331 - Music History and Literature I (2)
- MUH 332 - Music History and Literature II (2)
- MUH 334 - World Music (2)
- MUH 431 - Faith, Life, and Music (2)

### Music Theory:

- MUT 120 - Music Theory I (4)
- MUT 121 - Music Theory II (4)
- MUT 220 - Music Theory III (3)

Total: 31 Units

### Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 101 - Recital Attendance - 4 semesters (0)
- MUA 256 Piano (4)
- MUA 356 Piano (4)
- MUA 456 Piano (4)
- MUA 313 - Instrumental Conducting (2) *OR*
- MUA 312 - Choral Conducting and Literature (2)
- MUA 376 - Junior Recital (0)
- MUA 476 - Senior Recital (0)
- Voice (class or private) (2)
- MUE 311 - Piano Pedagogy I (2)
- MUE 411 - Piano Pedagogy II (2)
- MUH 311 - Piano Literature (3)
- MUH 333 - Music History and Literature III (2)
- MUP 339 - Small Ensemble (1/2) **2 Units required**
- *One-unit Ensembles* (4)
- Upper-division Theory (6)
- Music Electives (10)

Total: 47 Units

### Political Science, B.A.

## Program Learning Outcomes

Students who complete the program in Political Science will be able to:

1. Develop an appreciation of the field of politics.
2. Evaluate, design, and apply social science research with respect to political phenomena.
3. Understand and critically assess the processes, theories, and outcomes of political institutions and political behavior.
4. Demonstrate social scientific information literacy.
5. Develop and express ideas in written communication in an effective and scholarly manner.
6. Demonstrate oral communication abilities, particularly to convey complex ideas, recognize diverse viewpoints, and offer empirical evidence of an argument.
7. Construct and evaluate analytical, comprehensive arguments.

## Lower-Division Requirements

- POL 101 - Introduction to Political Science (GE) **(3)** \*
- POL 165 - American Government **(4)**
- POL 230 - Introduction to International Relations **(4)**
- POL 270 - Scope and Methods of Political Science **(4)**

Total: 15 Units

Note(s):

*\*Meets a requirement in general education*

## Upper-Division Requirements

### American Government

Four units from:

- POL 341 - Campaigns and Elections in an Electronic Age **(4)**
- POL 380 - Congress and the Presidency **(4)**

### Global Politics

Four units from:

- POL 420 - United States Foreign Policy **(4)**
- POL 435 - Global Governance **(4)**

### Comparative Government

- POL 370 - Comparative Politics **(4)**

## Political Theory

- POL 321 - Western Political Thought (4)

## Capitals Program

- POL 390 - American Capitals Program (9) **OR**
- POL 391 - World Capitals Program (3-12)

## Internships

- POL 460 - Internship in Political Science (2-4) **4 Units required**

## Electives

Eight additional units from:

- POL 301 - Transitions to Democracy (4)
- POL 320 - U.S. Constitution and Civil Liberties Law (4)
- POL 325 - American Political Thought (4)
- POL 330 - The Development of Feminist Thought (WS) (4)
- POL 341 - Campaigns and Elections in an Electronic Age (4)
- POL 351 - War and Peace Studies (4)
- POL 360 - Urban Politics (4)
- POL 380 - Congress and the Presidency (4)
- POL 415 - Women and Politics (WS) (4)
- POL 420 - United States Foreign Policy (4)
- POL 435 - Global Governance (4)
- POL 437 - International Economics (4) \*
- POL 438 - International Law (4)
- POL 441 - Issues in Public Policy (4)
- POL 442 - Contemporary Issues in World Politics (4)
- POL 444 - Contemporary Political Ideologies (4)
- POL 450 - Issues of Global Human Rights (2)
- POL 455 - Protest and Social Movements in World Politics (4)
- POL 490 - Special Studies in Political Science (1-4)

Total: 52 Units

Note(s):

*\*Required prerequisite for this course increases the number of units in the major.*

**Psychology, B.A.**

## Program Learning Outcomes

*Students who complete the program in Psychology will be able to:*

1. Identify basic tenets of psychology.
2. Summarize and apply facets of "The Good Life" as conceptualized in contemporary positive-moral psychology.
3. Display an increase in personal growth and development (for the purpose of serving others).
4. Demonstrate care for others.
5. Understand careers in psychology.

## Required Concentrations

*Choose a concentration from the following:*

Concentration A: Character Morality and Culture

Concentration B: General Psychology

Concentration C: Therapeutic and Community Psychology

## Lower-Division Requirements

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) **(3)** *(required of all students who graduated from high school the year prior to enrollment at PLNU)*
- PSY 103 - General Psychology (GE) **(3)**

Total: 6 Units

## Upper-Division Requirements

- PSY 300 - Personality and Adult Development **(4)**
- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**
- PSY 321 - Abnormal Psychology **(3)**
- PSY 390 - Research Methods and Statistics I **(4)**
- PSY 391 - Research Methods and Statistics II **(4)**
- PSY 400 - History and Contemporary Issues in Psychology **(2)**
- PSY 409 - Psychology of Cognition and Learning **(4)**
- PSY 420 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) **(4)**

Total: 29 Units

Core Total: 35 Units

## Required Concentrations

Concentration A: Character, Morality, and Culture Psychology

## Upper-Division Requirements

- PSY 315 - Positive Psychology (3)
- PSY 330 - Moral Psychology and Cultural Values (4)

One course from the following:

- PSY 410 - Issues in Psychotherapy-Theology Integration (3) \*
- PSY 440 - Psychology of Religion (4)
- **Plus three (3) units of Psychology electives** (*may also substitute MTH 363 or MTH 383 for Psychology elective*).

Total: 13-14 Units

Note(s):

*Electives - According to individual goals*

*\*If course is selected, must also take PSY 325 (4)*

Recommended

Concentration B: General Psychology

Upper-Division Requirements

- **Fifteen units of Psychology electives** (*can also substitute either MTH 363 or MTH 383 for Psychology elective*).

Concentration Total: 15 Units

Note(s):

*Electives - According to individual goals*

Concentration C: Therapeutic and Community Psychology

Upper-Division Requirements

- PSY 301 - Physiological and Neuropsychology (4)
- PSY 325 - Clinical and Community Interventions (4)
- PSY 350 - Clinical and Research Assessment (3)
- PSY 380 - Family Development and Family Therapies (3)
- PSY 410 - Issues in Psychotherapy-Theology Integration (3)

Concentration Total: 17 Units

### Recommended

- PSY 315 - Positive Psychology (3)
- PSY 341 - Group Counseling (1-3)
- PSY 345 - Group Dynamics (3) (PSY341 is a pre-requisite)

## Social Work, B.A.

The Social Work program prepares students to be leaders in service to the community through generalist practice. A career in Social Work offers a wide range of opportunities, including direct practice in social work with families, individuals or community-based organizations, as well as jobs in research, public relations, human services, probation and criminal justice, social welfare, counseling, or health care administration.

### Program Learning Outcomes

**Students who complete the program in Social Work will be able to:**

1. Demonstrate understanding of integrated body of knowledge required of a general practitioner as defined by the Council on Social Work Education.
2. Demonstrate a command of the professional values and ethics required of a general practitioner.
3. Demonstrate competence in the concrete practice of professional skills, especially those skills required by the Council on Social Work Education of a general practitioner.
4. Demonstrate an awareness of the influence of Christian and Wesleyan perspectives on social work practice.
5. Demonstrate preparation to transition to careers and/or graduate education in social work.

*All classes required for the major must be completed with a grade of "C" (2.000) or above.*

### Lower-Division Requirements

- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 250 - Sociology of the Family (3)
- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 101L - Human Biology and Bioethics Laboratory (GE) (1)
- ECO 102 - Principles of Microeconomics (GE) (3)
- MTH 203 - Introduction to Statistics (3)
- PSY 103 - General Psychology (GE) (3)

Total: 19 Units

### Upper-Division Requirements

- SWK 303 - Introduction to Social Work (3)
- SWK 330 - Social Welfare Policy (3)
  
- SWK 340 - Child Welfare (3) **OR**
- SOC 316 - Sociology of Aging (3)

- SWK 365 - Human Behavior in the Social Environment (3)
- SWK 370 - Social Work Practice I (3)
- SWK 371 - Social Work Practice II (3)
- SWK 470 - Social Work Practicum I (4)
- SWK 471 - Social Work Practicum II (4)
- SWK 472 - Seminar in Social Work I (2)
- SWK 473 - Seminar in Social Work II (2)
- SOC 360 - Race and Ethnicity (3)
- SOC 460 - Social Research Methods and Design (4)

Total: 37 Units

## Recommended Electives

- SOC 103 - Social Problems (GE) (3)
- SOC 305 - Social Stratification (3)
- SOC 330 - The Development of Feminist Thought (WS) (4)
- FCS 150 - Human Development (3)
- PSY 321 - Abnormal Psychology (3)
- PSY 300 - Personality and Adult Development (4)

## Sociology, B.A.

### Concentrations

General Sociology  
Criminal Justice

### Program Learning Outcomes

**Students who complete the program in Sociology will be able to:**

1. Understand society and social behavior in groups and society.
2. Develop competency in social research and social analysis.
3. Demonstrate preparation for post-graduate education.
4. Demonstrate preparation for employment.

**All classes required for the major must be completed with a grade of “C” (2.000) or above.**

### Lower-Division Requirements

- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 260 - Sociological Analysis (3)
- MTH 203 - Introduction to Statistics (3)

Select one of the following:

- SOC 103 - Social Problems (GE) (3)

- SOC 201 - Cultural Anthropology (GE) **(3)**
- SOC 250 - Sociology of the Family **(3)**

Total: 12 Units

### Upper-Division Requirements

- SOC 415 - Social Theory **(3)**
- SOC 460 - Social Research Methods and Design **(4)**
- SOC 476 - Senior Seminar in Sociology **(3)**

### Concentrations

#### General Sociology

Select 18 units from the following:

- SOC 303 - Urban Issues **(3)**
- SOC 305 - Social Stratification **(3)**
- SOC 310 - Criminology **(3) OR**
- SOC 314 - Juvenile Delinquency **(3)**
- SOC 316 - Sociology of Aging **(3)**
- SOC 320 - Social Psychology **(3)**
- SOC 321 - Justice, Politics, and the Social World **(3)**
- SOC 330 - The Development of Feminist Thought (WS) **(4)**
- SOC 350 - Urban Sociology **(3)**
- SOC 360 - Race and Ethnicity **(3)**
- SOC 375 - African Cultures and Histories **(3)**
- SOC 420 - Social Change **(3)**
- SOC 430 - Sociology of Religion **(3)**
- SOC 444 - Globalization and Culture **(3)**
- SOC 470 - Medical Sociology **(3)**
- SOC 471 - Internship in Sociology **(2-4)**
- SOC 475 - Sociology of Education **(3)**
- SOC 490 - Special Topics in Sociology **(1-4)**
- SOC 491 - Independent Studies in Sociology **(1-4)**
- A minimum of six additional units of upper-division courses from the following disciplines: Economics, History, Political Science, Psychology, Sociology, and Social Work.

Total: 34 Units

Total Major: 46 Units

#### Criminal Justice

## Program Learning Outcomes

### Students who complete the program in Criminal Justice will be able to:

1. Demonstrate comprehension of the theoretical and legal foundations of criminal justice.
2. Demonstrate knowledge of each of the components of the criminal justice system: the historical background, structure, function, and purpose.
3. Demonstrate understanding and appreciation of the social realities, discrimination, and conflicts in the criminal justice system resulting from racial, socio-economic, and cultural inequities.
4. Demonstrate ethical and professional behavior, and apply critical thinking and problem-solving skills, in an approved internship setting.

**All classes required for the major must be completed with a grade of "C" (2.000) or above.**

### Lower-Division Requirements

- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 209 - Introduction to Criminal Justice (3)
- POL 165 - American Government (4)
- MTH 203 - Introduction to Statistics (3)

Total: 13 Units

### Upper-Division Requirements

- SOC 310 - Criminology (3)
- SOC 360 - Race and Ethnicity (3)
- SOC 409 - Criminal Law (3)
- SOC 410 - Constitutional Foundations of Criminal Justice (3)
- SOC 415 - Social Theory (3)
- SOC 460 - Social Research Methods and Design (4)
- SOC 472 - Internship in Criminal Justice (2-4) **4 Units required**
- SOC 476 - Senior Seminar in Sociology (3)
- PSY 321 - Abnormal Psychology (3)

Total: 29 Units

### Recommended Electives

- SOC 103 - Social Problems (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)
- SOC 250 - Sociology of the Family (3)
- SOC 305 - Social Stratification (3)
- SOC 314 - Juvenile Delinquency (3)
- SOC 320 - Social Psychology (3)
- SOC 350 - Urban Sociology (3)
- SOC 420 - Social Change (3)

- SOC 470 - Medical Sociology (3)

Total Major Units: 48

## **Spanish, B.A.**

### Program Learning Outcomes

**Students who complete the program in Spanish will be able to:**

1. Write essays without significant errors of grammar, spelling, or vocabulary usage that would impede comprehension by a native speaker.
2. Comprehend the main idea and most details of connected oral discourse by a native speaker on a variety of topics.
3. Converse in a participatory fashion with a native speaker using a variety of language strategies to convey meaning.
4. Analyze and interpret target language texts and data sets according to their cultural, literary, and/or linguistic content.
5. Display knowledge of the nature and structure of language.
6. Discuss the influence of their own perspective on cultural interconnections through engagement with local, national, or international communities.

Students desiring to become secondary Spanish teachers should take EDU 302 , EDU 404 , and EDU 306 their junior and senior years. These courses must be taken in given order.

It is recommended that prospective majors who anticipate doing graduate work in Spanish become familiar with French or German. They should also plan to take collateral courses in British, American, French, or Russian literature; philosophy; and history.

### Lower-Division Requirements

- SPA 101 - Elementary Spanish I (GE) (4)
- SPA 102 - Elementary Spanish II (GE) (4)
- SPA 250 - Intermediate Spanish I (3)
- SPA 251 - Intermediate Spanish II (3)
- LIT 250 - Introduction to the Study of Literature (3)

Total: 17 Units

### Upper-Division Requirements

- SPA 302 - Advanced Grammar and Reading (3)
- SPA 303 - Advanced Conversation and Composition (3)
- SPA 310 - Latin American Culture and Civilization (3)
- SPA 315 - Culture and Civilization of Spain (3)
- SPA 320 - Mexican American Literature and Culture (3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 390 - Current Spanish Linguistics (3)

- SPA 485 - Senior Seminar in Spanish (1)

One of the following:

- SPA 400 - Peninsular Literature Before 1800 (3)
- SPA 402 - Peninsular Literature Since 1800 (3)

One of the following:

- SPA 437 - Latin American Literature Before 1910 (3)
- SPA 439 - Latin American Literature Since 1910 (3)

Note(s):

Take six upper-division study-abroad units approved by the Department and Dean of the College of Arts and Humanities. Study abroad courses can substitute for or complement courses required in the major.

Total: 28 Units

Total Major: 45 Units

## **Visual Arts, B.A.**

### Program Learning Outcomes

**Students who complete the program of Visual Arts with concentrations in Painting, Drawing, and Printmaking, Sculpture and Installation, and Photography will be able to:**

1. Apply the art elements and design principles to two-and/or three-dimensional visual art forms to critically analyze works of art.
2. Create original works of art that demonstrate a contemporary approach to theory, media, and technology.
3. Write and speak knowledgeably and critically about issues relevant to historically important artists, art styles, and art movements.
4. Write and speak with coherency and self-awareness about their own artwork or research, and its relationship to contemporary culture and art history.
5. Pursue graduate or artist/scholars-in-residency programs, gallery and museum exhibitions, and public art commissions.

*Students who complete the program in Visual Art with a concentration in Art History will be able to:*

1. Recognize a wide range of artists, visual art forms, and cultures from the history of Western and Non-Western art.
2. Create original, contemporary artworks in studio and/or design that illustrate current skills and techniques in selected art media and technologies.
3. Use the elements of art and principles of design to critically analyze and interpret historical and contemporary art forms.

**Students who complete the program in Visual Art with a concentration in Video, Performance, and Interactive Media will be able to:**

1. Perform technological skills and techniques to produce time-based artworks in video, performance, or interactive media.
2. Use the elements of art and principles of design to describe, analyze, and evaluate works of time-based art.
3. Apply historical and contemporary art forms and theories to time-based media.

## Concentrations

- Drawing/Painting/Printmaking Concentration
- Sculpture and Installation Concentration
- Photography Concentration
- Art History Concentration
- Video, Performance, and Interactive Media Concentration

## Art History Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- HIS 270 - Research Methods (4)

### Electives (Lower-Division)

Choose one:

- ART 206 - Experimental Drawing Studio (3)
- ART 210 - Painting: Color and Technique (3)
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 223 - Printmaking I (3)

Total: 22 Units

### Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 325 - Non-Western Art History (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)

### Electives (Upper-Division)

- Choose one four unit upper-division history course (4)

Choose two:

- COM 300 - Narrative and Documentary Film (3)
- HIS 375 - African Cultures and Histories (3)
- PHL 341 - Philosophy and Art (3)
- Upper-division transfer courses in Art History (3-6)

Total: 32 Units

## Drawing/Painting/Printmaking Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- ART 206 - Experimental Drawing Studio (3)
- ART 210 - Painting: Color and Technique (3)
- ART 202 - Introduction to Computer Graphics (3)
- ART 223 - Printmaking I (3)

Total: 27 Units

### Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
  
- ART 310 - Painting II (3) **OR**
- ART 323 - Printmaking II (3)
  
- ART 345 - Life Drawing (3)
- ART 390 - Advanced Studio Practice (3)
- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)
- **Complete one additional upper-division Art course (2-3)**

Total: 27-28 Units

## Photography Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- ART 206 - Experimental Drawing Studio (3)
- ART 202 - Introduction to Computer Graphics (3)
- ART 221 - Photography: Darkroom and Film (3)

#### Electives (Lower Division)

Choose one:

- ART 203 - Graphic Design I: Visual Symbolism (3)
- ART 210 - Painting: Color and Technique (3)
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 223 - Printmaking I (3)
- ART 226 - Photography: Digital (3)

Total: 27 Units

#### Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 321 - Photography: Alternative Processes (3)
- ART 326 - Photography: Contemporary Images (3)
- ART 390 - Advanced Studio Practice (3)
- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)
- **Complete one additional upper-division Art course (2-3)**

Total: 27-28 Units

#### Sculpture and Installation Concentration

##### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- ART 206 - Experimental Drawing Studio (3)
- ART 202 - Introduction to Computer Graphics (3)

- ART 222 - Sculpture: Materials and Fabrication (3)

#### Electives (Lower-Division)

Choose one:

- ART 203 - Graphic Design I: Visual Symbolism (3)
- ART 210 - Painting: Color and Technique (3)
- ART 226 - Photography: Digital (3)
- ART 221 - Photography: Darkroom and Film (3)
- ART 223 - Printmaking I (3)
- TRE 270 - Acting I (3)

Total: 27 Units

#### Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 322 - Sculpture: Objects and Installation (3)
- ART 390 - Advanced Studio Practice (3)
- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)

#### Electives (Upper-Division)

- **Choose five to six units from any upper-division Art, Design, or Art History courses offered by the Department of Art and Design or choose from the following:**
- COM 300 - Narrative and Documentary Film (3)
- TRE 304 - Theatre History (3)
- TRE 354 - Movement I (3) **OR**
- TRE 370 - Acting II (3)

Total: 27-28 Units

#### Video, Performance, and Interactive Media Concentration

##### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3) **OR**
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)

- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- ART 202 - Introduction to Computer Graphics (3)
- ART 226 - Photography: Digital (3)
- COM 243 - Introduction to TV and Film Production (3)
- COM 275 - Audio Production (2)

Note(s):

*\*Fulfills general education requirement*

Total: 23 Units

### Upper-Division Requirements

- ART 305 - Contemporary Art History (3)
- ART 315 - Introduction to Interactive Web Design (3)
- ART 390 - Advanced Studio Practice (3)
- ART 450 - Interactive Web Design (3)
- COM 300 - Narrative and Documentary Film (3)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)

### Capstone Courses

- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)

Total: 31 Units

### Recommended Electives\*

- TRE 270 - Acting I (3)
- TRE 354 - Movement I (3)
- TRE 437 - Lighting and Makeup Techniques (2)

Note(s):

*\*Also recommended in Sculpture and Installation Concentration*

Note(s):

*\*Meets the general education requirement in the Fine Arts*

## **Vocal Performance, Bachelor of Music**

## Program Learning Outcomes

*Students who complete the program in Vocal Performance will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

## Core Curriculum

*(Required of all Music majors)*

### Applied:

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**
- MUH 334 - World Music **(2)**
- MUH 431 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 120 - Music Theory I **(4)**
- MUT 121 - Music Theory II **(4)**
- MUT 220 - Music Theory III **(3)**

Total: 31 Units

## Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 101 - Recital Attendance - 4 semesters **(0)**
- MUA 250 - Diction for Singers I **(1)**

- MUA 251 - Diction for Singers II (1)
- MUA 255 - Voice (4)
- MUA 355 - Voice (4)
- MUA 455 - Voice (4)
- MUA 312 - Choral Conducting and Literature (2)
- MUA 376 - Junior Recital (0)
- MUA 476 - Senior Recital (0)
- MUE 310 - Vocal Pedagogy (2)
- MUE 451 - Internship in Music (2)
- MUH 309 - Vocal Literature I (2)
- MUH 310 - Vocal Literature II (2)
- MUH 333 - Music History and Literature III (2)
- *Upper-division Theory* (6)
- *One-unit Ensembles* (4)
- *Music Electives* (8)

Three units from:

- MUA 331 - Acting for Singers (1)
- MUA 332 - Musical Theatre Production (1-2)

Total: Units 47

Note(s):

Vocal Performance majors must complete their General Education language requirement in French or German. Approved transfer courses in Italian will also fulfill this requirement.

## **Writing, B.A.**

### Program Learning Outcomes

**Students who complete the program in Writing will be able to:**

1. Apply creative and advanced skills in various forms and genres of writing, demonstrating critical thinking and quantitative reasoning appropriately.
2. Demonstrate knowledge of the conventions and terminology of creative and advanced writing within literary and non-literary texts.
3. Demonstrate knowledge of major literary-theoretical perspectives and terminology.
4. Develop connections between the literature and language studied and the contemporary world.
5. Engage in writing and editorial processes through campus publications and external internships.
6. Present creative work to formal audiences, demonstrating strategies for audience engagement and oral communication of written work.

### Lower-Division Requirements

- WRI 220 - Introduction to Creative Writing (3)

- JRN 250 - Introduction to Journalism (3)
- LIT 250 - Introduction to the Study of Literature (3)

One course from the following:

- LIT 254 - British Writers I (3)
- LIT 255 - British Writers II (3)
- LIT 256 - American Writers I (3)
- LIT 257 - American Writers II (3)

Four units from the following:

- JRN 215 - Newspaper Workshop (1) \*\*
- WRI 216 - Literary Magazine Workshop (1) \*\*
- JRN 217 - Yearbook Workshop (1) \*\*

Note(s):

*\*\*Each may be taken more than once (may substitute JRN 314 for two units of JRN 215/WRI 216/JRN 217).*

Total: 13 Units

## Creative Writing Courses

Six (6) units from the following list:

**WRI 321, 322, and 323 may be repeated once for credit with instructor's consent.**

- WRI 321 - Creative Writing: Poetry (3)
- WRI 322 - Creative Writing: Fiction (3)
- WRI 323 - Creative Writing: Creative Nonfiction (3)

Total: 6 Units

## Upper-Division Requirements

- WRI 315 - Advanced English Composition (3)
- JRN 345 - Editing (3) **OR**
- JRN 440 - Magazine Editing and Concepts (3)
- WRI 420 - Advanced Writing Workshop (3)
- WRI 365 - Writing for Professional Careers (3)
- WRI 470 - Internship in Writing (2)

One course from the following:

- LIN 312 - Introduction to Linguistics (3)
- LIN 365 - English Grammar and Usage (3)

One course from the following not already taken:

- WRI 370 - Writing Theory and Pedagogy (2)
- JRN 430 - Multimedia Journalism (3)
- JRN 440 - Magazine Editing and Concepts (3)

Upper Division Literature course

One additional upper division literature course beyond GE from courses listed under Literature, Spanish or French. (3)

Total: 22-23 Units

Total Major: 44-45 Units

## Minor

### Accounting Minor

A minor in Accounting is for students who are interested in an understanding of accounting principles and techniques, but who do not want to pursue a major in Accounting.

### Lower-Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 7 Units

### Upper-Division Requirements

- ACC 370 - Intermediate Accounting I (3)
- ACC 371 - Intermediate Accounting II (3)

Two (2) of the following:

- ACC 375 - Managerial Cost Accounting (3)
- ACC 410 - Federal Tax Accounting I (3)
- ACC 421 - Advanced Accounting (3)
- ACC 425 - Financial Statement Analysis and Valuation (3)
- ACC 460 - Auditing (3)

Total: 12 Units

Minor Total: 19 Units

## **Art History Minor**

### **Program Learning Outcomes**

*Students who complete the program in Art History will be able to:*

1. Recognize a wide range of artists, visual art forms, and cultures from the history of Western and Non-Western art.
2. Create original, contemporary artworks in studio and/or design that illustrate current skills and techniques in selected art media and technologies.
3. Use the elements of art and principles of design to critically analyze and interpret historical and contemporary art forms.

### **Lower-Division Requirements**

- ART 200 - History of Art I (GE) **(3)** \*
- ART 201 - History of Art II (GE) **(3)** \*

Total: 6 Units

### **Upper-Division Requirements**

- ART 304 - Modern Art History **(3)**
- ART 305 - Contemporary Art History **(3)**
- ART 325 - Non-Western Art History **(3)**
- ART 335 - Design History: Industrial Revolution to Contemporary Design **(3)**

Total: 12 Units

Minor Total: 18 Units

Note(s):

**\*Meets the general education requirement in the Fine Arts.**

## **Art Minor**

### **Required**

### **Lower-Division Requirements**

- ART 103 - Two-Dimensional Design **(3)** *OR*
- ART 104 - Three-Dimensional: Composition and Space Design **(3)**

- ART 115 - Drawing I (3)

Total: 6 Units

### Upper-Division Requirements

- ART 304 - Modern Art History (3) OR
- ART 305 - Contemporary Art History (3)

Electives: 9 Units

**Choose nine upper-division units from Studio and Graphic Design courses listed in the Catalog.**

Total: 12 Units

Minor Total: 18 Units

Note(s):

*It is highly recommended that Art minors take either ART 200 or ART 201 to fulfill the general education requirement in the Fine Arts.*

## **Athletic Coaching Minor**

### Requirements

- KIN 280 - Introduction to Athletic Training (2)
- KIN 280L - Introduction to Athletic Training Lab (1)
- PED 200 - Optimal Health (GE) (2) \*
- PED 350 - Foundations and Techniques of Coaching (4)
- EXS 330 - Nutrition for Exercise and Sport Performance (3)
- EXS 370 - Praxis of Strength Training and Conditioning (3)
  
- KIN 484 - Practicum in Kinesiology (1-3) **3 Units Required OR**
- KIN 488 - Internship in Kinesiology (1-3) **3 Units Required**

One of the following:

- PED 220 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 225 - Individual and Dual Sports (GE) (2)

Total: 20 Units

(Includes 4 units that meet general education requirements)

Note(s):

*\*Satisfies general education requirement*

## **Biblical Studies Minor**

### Lower Division Requirements

- BIB 101 - Old Testament History and Religion (GE) (2)
- BIB 102 - New Testament History and Religion (GE) (3)
- BIB 240 - Reading Scripture Faithfully (3)

Total: 8 units

### Upper Divisions Requirements

- **Choose four (4) upper division BIB courses with at least one focusing on the Old Testament and at least one focusing on the New Testament.**

Total: 12 units

Minor Total: 20 units

## **Biology: Cell and Molecular Biology Minor**

### Required

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- BIO 345 - Genetics (4)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4)

Nine units from the following electives:

- BIO 315 - Microbiology (3)
- BIO 350 - Advanced Cell Biology (3)
- BIO 352 - Research Methodology (2)
- BIO 380 - Molecular Biology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 423 - Advanced Human Physiology (3)

Note(s):

*\*Course can be waived.*

Total: 25 Units

## **Biology: Environmental Biology Minor**

### Required

- BIO 102 - Environment and People (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
  
- CHE 101 - Chemistry and Society (GE) (4)  
*OR*
- CHE 151 - General Chemistry Tutorial (1) \*  
**AND**
- CHE 152 - General Chemistry I (GE) (4)

Lower Division Total: 12-13 Units

Note(s):

*\*Course can be waived.*

### Upper-Division Requirements

- BIO 363 - Conservation Ecology (3)

Choose 5 units of Approved Electives from the following:

- BIO 312 - Applied Plant Biology (2)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 430 - Animal Behavior (3)
- BIO 473 - Experimental Marine Ecology (3)

### Off-Campus Requirement

- **One approved off-campus field-immersion course (4)**

Upper Division Total: 12 Units

Total for Minor: 24-25 Units

## **Biology: Organismal Biology Minor**

### Required

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- BIO 212 - Organismal Biology (3)
- BIO 363 - Conservation Ecology (3)

### Nine units from the following electives:

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 473 - Experimental Marine Ecology (3)

Total: 23 Units

## **Business Administration Minor**

A minor in Business Administration is for those who wish to complement study in another area with a basic background in business. The minor consists of introductory courses in Economics, Accounting, and upper-division courses designed to acquaint the student with disciplines essential to business success.

### Lower-Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3)  
\* ACC201 and ACC202 sequence may be substituted for ACC200.
- MGT 212 - Principles of Management (3)

### One (1) of the following:

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)

Total: 9 Units

### Upper-Division Requirements

- MKT 332 - Principles of Marketing (3)
- Nine units selected from any upper-division course in Business, Accounting, Marketing, Management, Finance or Economics (9)

Total: 12 Units

Minor Total: 21 Units

## **Child Development Minor**

This minor is for students who desire an introductory exposure to the study of child development. It will also meet the requirements for the Associate Teacher Permit needed for teachers in Early Childhood.

A minimum of 18-20 units are required for this minor, including the following lower and upper-division courses.

### **Requirements**

- FCS 120 - Child and Adolescent Development (4)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- FCS 355 - Development of Special Needs Children (3)
- FCS 385 - Family and Parenting (2)
- FCS 420 - Child Development in the Family and Community (4)

Total: 16 Units

Take one (1) additional course from the following:

- FCS 203 - Infant and Toddler Development (3)
- FCS 305 - Life Cycle Nutrition (4)
- FCS 310 - Early Childhood Education (4)
- FCS 313 - Adolescent Development in the Family Context (2)

Total: 2-4 Units

Minor Total: 18-20 Units

## **Christian Mission & Intercultural Ministry Minor**

### **Lower Division Requirements**

- CMI 155 - Christian Formation and Ministry (3)
- SOC 201 - Cultural Anthropology (GE) (3)

Total: 6 units

## Upper Division Requirements

- CMI 350 - Church as a Witness to the World (3)
- CMI 410 - Leading in Ministry (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- THE 320 - The World's Faith Traditions (3)

Total: 12 units

Minor Total: 18 units

## Christian Studies Minor

### Lower Division Requirements

- BIB 240 - Reading Scripture Faithfully (3)
- CMI 155 - Christian Formation and Ministry (3)
- PHL 250 - God and Philosophy (3)
- THE 250 - Introduction to Christian Theology (3)

Total: 12 units

### Upper Division Requirements

- **Choose four (4) upper division courses from the following electives\*\***

#### \*\* Christian Studies Elective Options:

- BIB 301 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 302 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 314 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)
- BIB 335 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse (3)
- BIB 378 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- BIB 410 - Biblical Theology (3)
- BIB 413 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 490 - Special Studies in Bible (1-3)
- BIB 495 - Seminar in Biblical Literature (3)
- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 340 - Foundations for the Practice of Youth Ministry (3)
- CMI 345 - Enacting Worship (3)
- CMI 350 - Church as a Witness to the World (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 410 - Leading in Ministry (3)

- CMI 415 - The Church of the Nazarene: History and Polity (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- CMI 425 - Youth and Family Ministry (3)
- CMI 490 - Special Studies in Christian Ministry (1-3)
- THE 305 - Christian Faith and the Natural Sciences (3)
- THE 315 - Christian and Religious Themes in Literature (3)
- THE 320 - The World's Faith Traditions (3)
- THE 325 - The Human Person and Theology and Psychology (3)
- THE 330 - Christ and the Church (3)
- THE 335 - Christian Ethics (3)
- THE 410 - The Ministry and Sermons of John Wesley (3)
- THE 415 - Three Traditions of Protestant Theology (3)
- PHL 277 - Logic (3)
- PHL 301 - Plato and Aristotle (3)
- PHL 302 - Descartes through Hegel (3)
- PHL 321 - Justice, Politics, and the Social World (3)
- PHL 331 - Existential Philosophy and Literature (3)
- PHL 341 - Philosophy and Art (3)
- PHL 360 - Philosophy and the Sciences (3)
- PHL 371 - Education and the Ethical Life (3)
- PHL 380 - Alienation, Transformation, and Reconciliation in Film (3)
- PHL 381 - Ethics, Responsibility, and Love (3)

Total: 12 units

Minor Total: 24 units

## **Cinema Studies Minor - Communication and Theatre**

This is an interdisciplinary minor in cinema which draws from historical, religious, philosophical, theoretical, and aesthetic perspectives. Students are encouraged to select courses which are based on students' intellectual and professional interests. Students interested in film criticism and/or writing and teaching may take electives in film theory and criticism, while students interested in scriptwriting and production may take courses in those areas. The minor is structured as interdisciplinary in its electives so that students will truly be studying in the liberal arts tradition. All students must take the required courses, and then must select from the elective courses to complete the minor.

### **Program Learning Outcomes**

1. Identify and articulate the relationships among film styles, genres, and techniques.
2. Demonstrate knowledge of the relationship between films and the historical moments from which they emerge.
3. Analyze and interpret the film images and narratives using film theory and terminology.
4. Evaluate films, including from a faith based perspective, by using higher and lower order thinking and writing skills.
5. Construct film scripts and create films by using film production techniques.

### **Core Courses**

- LIT 200 - Literature and Culture (GE) (2) \*
- COM 243 - Introduction to TV and Film Production (3)
- COM 300 - Narrative and Documentary Film (3)

Total: 8 Units

Notes:

\* LIT 200 Literature and Culture course subtitle must be "Film Adaptation".

COM 175 is recommended, but cannot be substituted for required or elective course for this minor.

Elective Courses: Nine (9) elective units taken from three (3) separate disciplines

Communication

- COM 420 - Communication Practicum II (1-2)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)
- COM 490 - Special Studies in Communication (1-3)

History

- HIS 368 - Modern China Through Film (4)
- HIS 490 - Special Studies in History (1-4)

Literature, Journalism, and Modern Languages

- LIT 351 - World Cinema (GE) (3)
- LIT 490 - Special Studies in Literature (1-3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 490 - Special Studies in Spanish (1-3)

Theology and Christian Ministry

- PHL 380 - Alienation, Transformation, and Reconciliation in Film (3)

Total for Minor: 17-20 Units

### **Cinema Studies Minor - Literature, Journalism and Modern Language**

This is an interdisciplinary minor in cinema which draws from historical, religious, philosophical, theoretical, and aesthetic perspectives. Students are encouraged to select courses which are based on students' intellectual and professional interests. Students interested in film criticism and/or writing and teaching may take electives in film theory and criticism, while students interested in scriptwriting and production may take courses in those areas. The

minor is structured as interdisciplinary in its electives so that students will truly be studying in the liberal arts tradition. All students must take the required courses, and then must select from the elective courses to complete the minor.

## **Program Learning Outcomes**

1. Identify and articulate the relationships among film styles, genres, and techniques.
2. Demonstrate knowledge of the relationship between films and the historical moments from which they emerge.
3. Analyze and interpret the film images and narratives using film theory and terminology.
4. Evaluate films, including from a faith based perspective, by using higher and lower order thinking and writing skills.
5. Construct film scripts and create films by using film production techniques.

## **Core Courses**

- LIT 200 - Literature and Culture (GE) (2) \*
- COM 243 - Introduction to TV and Film Production (3)
- COM 300 - Narrative and Documentary Film (3)

**Total: 8 Units**

## **Notes:**

\* LIT 200 Literature and Culture course subtitle must be "Film Adaptation".

COM 175 is recommended, but cannot be substituted for required or elective course for this minor.

**Elective Courses: Nine (9) elective units taken from three (3) separate disciplines**

## **Communication**

- COM 420 - Communication Practicum II (1-2)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)
- COM 490 - Special Studies in Communication (1-3)

## **History**

- HIS 368 - Modern China Through Film (4)
- HIS 490 - Special Studies in History (1-4)

## **Literature, Journalism, and Modern Languages**

- LIT 351 - World Cinema (GE) (3)
- LIT 490 - Special Studies in Literature (1-3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)

- SPA 490 - Special Studies in Spanish (1-3)

## **Theology and Christian Ministry**

- PHL 380 - Alienation, Transformation, and Reconciliation in Film (3)

## **Total for Minor: 17-20 Units**

## **Communication Minor**

### Lower-Division Requirements

Choose two (2) courses from the following:

- COM 190 - Interpersonal Communication (3)
- COM 220 - Small Group Communication (3)
- COM 231 - Argumentation and Debate (GE) (3)
- COM 260 - Advanced Public and Professional Speaking (3)

Total: 6 Units

### Upper-Division Requirements

Choose any four (4) courses from the following:

- COM 310 - Nonverbal Communication (3)
- COM 312 - Gender and Communication (WS) (3)
- COM 315 - Oral Interpretation (3)
- COM 340 - Organizational Communication (3)
- COM 345 - Management Communication (3)

Total: 12 Units

Minor Total: 18 Units

## **Computational Science Minor - Biology/Environmental Science (Biology)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

## **Courses for Biology/Environmental Science Emphasis**

## Lower-Division Requirements

- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- CSC 143 - Introduction to Computer Programming (3)

## Upper-Division Requirements

- BIO 363 - Conservation Ecology (3)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- 
- **PROJECT:** (*Choose At Least 3 Units*)
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

## Biology Major - Required Courses

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

## Minor Total for Biology Majors: 25

## Computer Science Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
- 
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

## Minor Total for Computer Science Majors: 27

## Mathematics Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)

- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

## **Minor Total for Mathematics Majors: 25**

### **Computational Science Minor - Biology/Environmental Science (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

#### Courses for Biology/Environmental Science Emphasis

##### Lower-Division Requirements

- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- CSC 143 - Introduction to Computer Programming (3)

##### Upper-Division Requirements

- BIO 363 - Conservation Ecology (3)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)

**PROJECT:** *(Choose At Least 3 Units)*

- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

#### Biology Major - Required Courses

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

Minor Total for Biology Majors: 25

#### Computer Science Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 27

### Mathematics Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 25

## Computational Science Minor - Biology/Genetics (Biology)

### Core Courses for Biology/Genetics Emphasis

#### Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- CSC 143 - Introduction to Computer Programming (3)

#### Upper-Division Requirements

- BIO 345 - Genetics (4)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- 
- **PROJECT:** *(Choose at least 3 units)*
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

## **Biology Major - Required Courses**

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

**Minor Total for Biology Majors: 26**

## **Computer Science Majors - Required Courses**

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 383 - Mathematical Probability and Statistics (3)

**Minor Total for Computer Science Majors: 28**

## **Mathematics Majors - Required Courses**

- MTH 164 - Calculus I (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

**Minor Total for Mathematics Majors: 26**

## **Computational Science Minor - Biology/Genetics (Mathematics and Computer Science)**

Core Courses for Biology/Genetics Emphasis

Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- CSC 143 - Introduction to Computer Programming (3)

Upper-Division Requirements

- BIO 345 - Genetics (4)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)

**PROJECT:** *(Choose at least 3 units)*

- HON 498 - Honors Project I (2) **and**
  - HON 499 - Honors Project II (1)
- OR

- MTH 495 - Service Learning in Mathematics (3)  
OR
- CSC 495 - Service Learning in Computer Science (3)

### Biology Major - Required Courses

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

Minor Total for Biology Majors: 26

### Computer Science Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 26

## Computational Science Minor - Chemistry (Chemistry)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

## Core Courses for Chemistry Emphasis

### Lower-Division Requirements

- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CSC 143 - Introduction to Computer Programming (3)
- MTH 164 - Calculus I (GE) (4)

### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- 
- **Project:** (*Choose at least 3 units*)
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### **Chemistry Major - Required Courses**

- CHE 213 - Analytical Chemistry (3)
- CHE 325 - Physical Chemistry I (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)
- OR
- MTH 383 - Mathematical Probability and Statistics (3)

### **Minor Total for Chemistry Majors: 34**

### **Computer Science Majors - Required Courses**

- ISS 414 - Data Base Systems and Web Integration (4)
- 
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

### **Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- CHE 213 - Analytical Chemistry (3)
- CHE 325 - Physical Chemistry I (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

### **Minor Total for Mathematics Majors: 34**

## Computational Science Minor - Chemistry (Mathematics and Computer Science)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

### Core Courses for Chemistry Emphasis

#### Lower-Division Requirements

- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CSC 143 - Introduction to Computer Programming (3)
- MTH 164 - Calculus I (GE) (4)

#### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)

**Project:** *(Choose at least 3 units)*

- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

#### Chemistry Major - Required Courses

- CHE 213 - Analytical Chemistry (3)
- CHE 325 - Physical Chemistry I (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)
- OR
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Chemistry Majors: 34

#### Computer Science Majors - Required Courses

- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 363 - Calculus Based Statistics With R (3) **OR**

- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CHE 213 - Analytical Chemistry (3)
- CHE 325 - Physical Chemistry I (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 34

## Computational Science Minor - Physics (Mathematics and Computer Science)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

### Core Courses for Physics Emphasis

#### Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- MTH 164 - Calculus I (GE) (4)
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

#### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

### Physics or Engineering-Physics Major - Required Courses

- EGR 120 - Computational Methods for Engineers & Scientists II (1)
- CSC 322 - Data Management for Computational Science (2)
- PHY 304 - Modern Physics (4)

**Project:** (*Choose at least 3 units*)

- HON 498 - Honors Project I (2) **and**
  - HON 499 - Honors Project II (1)
- OR

- MTH 495 - Service Learning in Mathematics (3)  
OR
- CSC 495 - Service Learning in Computer Science (3)

Minor Total for PHY & PHY/EGR Majors: 30

### Computer Science Majors - Required Courses

- CSC 311 - R for Computational Science (1)
- ISS 414 - Data Base Systems and Web Integration (4)

**PROJECT:** *(Choose at least 3 units)*

- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)  
OR
- MTH 495 - Service Learning in Mathematics (3)  
OR
- CSC 495 - Service Learning in Computer Science (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CSC 311 - R for Computational Science (1)
- CSC 322 - Data Management for Computational Science (2)
- PHY 304 - Modern Physics (4)

**PROJECT:** *(Choose at least 3 units)*

- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)  
OR
- MTH 495 - Service Learning in Mathematics (3)  
OR
- CSC 495 - Service Learning in Computer Science (3)

Minor Total for Mathematics Majors: 32

## Computational Science Minor - Physics (Physics and Engineering)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

## Core Courses for Physics Emphasis

## Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- MTH 164 - Calculus I (GE) (4)
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

## Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- 
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

## Physics or Engineering-Physics Major - Required Courses

- EGR 120 - Computational Methods for Engineers & Scientists II (1)
- CSC 322 - Data Management for Computational Science (2)
- PHY 304 - Modern Physics (4)
- 
- **Project:** (*Choose at least 3 units*)
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

## Minor Total for PHY & PHY/EGR Majors: 30

## Computer Science Majors - Required Courses

- CSC 311 - R for Computational Science (1)
- ISS 414 - Data Base Systems and Web Integration (4)
- 
- **PROJECT:** (*Choose at least 3 units*)
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)

- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### **Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- CSC 311 - R for Computational Science (1)
- CSC 322 - Data Management for Computational Science (2)
- PHY 304 - Modern Physics (4)
- 

**PROJECT:** *(Choose at least 3 units)*

- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### **Minor Total for Mathematics Majors: 32**

### **Computational Science Minor - Psychology (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics, or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross-disciplinary teams to solve challenging research problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### **Core Courses for Psychology Emphasis**

#### **Lower Division Requirements**

- PSY 103 - General Psychology (GE) (3)
- CSC 143 - Introduction to Computer Programming (3)

#### **Upper Division Requirements**

- PSY 320 - Social Psychology (3)
- PSY 301 - Physiological and Neuropsychology (4) **or**
- PSY 409 - Psychology of Cognition and Learning (4)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)

**Project:** (*choose at least 3 units*)

- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### Psychology Majors - Required Courses

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

Minor Total for Psychology Majors: 28

### Computer Science Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 30

### Mathematics Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 28

### **Computational Science Minor - Psychology (Psychology)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics, or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross-disciplinary teams to solve challenging research problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## Core Courses for Psychology Emphasis

### Lower Division Requirements

- PSY 103 - General Psychology (GE) (3)
- CSC 143 - Introduction to Computer Programming (3)

### Upper Division Requirements

- PSY 320 - Social Psychology (3)
- PSY 301 - Physiological and Neuropsychology (4) **or**
- PSY 409 - Psychology of Cognition and Learning (4)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- 
- **Project:** (*choose at least 3 units*)
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### Psychology Majors - Required Courses

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

### Minor Total for Psychology Majors: 28

### Computer Science Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
- 
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

### Minor Total for Computer Science Majors: 30

## **Mathematics Majors - Required Courses**

- MTH 164 - Calculus I (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

## **Minor Total for Mathematics Majors: 28**

## **Computer Science Minor**

A minor in Computer Science is offered to those who wish to complement study in another discipline. This minor is not available to students who earn a major in Information Systems.

### **Lower-Division Requirements**

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)

Total: 11 Units

### **Upper-Division Requirements**

Choose 10 units from:

- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- CSC 394 - Programming Languages (4)
- CSC 412 - Topics in Computer Science (2)
- CSC 454 - Computer Architecture and Assembly Language (4)
- ISS 373 - Networking and Security (3)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 343 - Discrete Mathematics (3)

Total: 10 Units

Minor Total: 21 Units

## **Computer Technology - Business Minor (Business Majors)**

The Computer Technology - Business minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for business students who desire to enter business or accounting careers with a greater knowledge of information and computer technology.

### **Lower-Division Requirements**

- ACC 201 - Principles of Financial Accounting (4)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)
- MGT 212 - Principles of Management (3)

Total: 16 Units

### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 322 - Data Management for Computational Science (2)
- ISS 342 - Project Management and Quality Assurance (2)
- MKT 332 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 300-499 for three (3) units.**

Total: 12 Units

Minor Total: 28 Units

## **Computer Technology - Business Minor (Math and Computer Science Majors)**

The Computer Technology - Business minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for math and computer science students who desire to enter the technology or computer science careers with a greater knowledge of business.

### Lower-Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- MGT 212 - Principles of Management (3)

Choose one course from the following:

- CSC 252 - Data Structures in C++ (2)
- CSC 254 - Data Structures and Algorithms (4)

Total: 15-17 Units

Note(s):

\* The ACC201 (4) and ACC202 (3) sequence may be substituted for ACC200.

## Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 414 - Data Base Systems and Web Integration (4)
- MKT 332 - Principles of Marketing (3)

Choose one course from the following:

- BUS 475 - Sustainability in Action (3)
- BUS 480 - International Business (3)
- MGT 320 - Organizational Behavior (3)
- MGT 374 - Human Resource Management (3)
- MGT 382 - Applied Entrepreneurship (3)
- MGT 412 - Leadership Theory and Practice (3)
- MGT 416 - Perspectives on Leadership (3)
- MGT 470 - Nonprofit Organization Management (3)
- MGT 484 - Operations Management (3)

Total: 14 Units

Minor Total: 29-31 Units

## Computer Technology - Marketing Minor (Business Majors)

The Computer Technology - Marketing minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for marketing students who desire to enter marketing or business careers with a greater knowledge of information and computer technology.

## Lower-Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)

Total: 13 Units

## Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 322 - Data Management for Computational Science (2)
- MKT 332 - Principles of Marketing (3)
- **Choose two additional courses from MKT 300-459 for six (6) units.**

Total: 13 Units

Minor Total: 26 Units

## **Computer Technology - Marketing Minor (Math and Computer Science Majors)**

The Computer Technology - Marketing minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for math and computer science students who desire to enter technology or computer science careers with a greater knowledge of marketing.

### Lower-Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors **(3)** \*
- CSC 143 - Introduction to Computer Programming **(3)**
- CSC 154 - Objects and Elementary Data Structures **(4)**

Choose one course from the following:

- CSC 252 - Data Structures in C++ **(2)**
- CSC 254 - Data Structures and Algorithms **(4)**

Total: 12-14 Units

Note(s):

\* The ACC201 (4) and ACC202 (3) sequence may be substituted for ACC200.

### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science **(2)**
- ISS 414 - Data Base Systems and Web Integration **(4)**
- MKT 332 - Principles of Marketing **(3)**

Choose two courses from the following:

- MKT 333 - Consumer and Organizational Buying Behavior **(3)**
- MKT 334 - Professional Selling and Sales Management **(3)**
- MKT 336 - Integrated Marketing Communications **(3)**
- MKT 432 - Marketing Research **(3)**

Total: 15 Units

Minor Total: 27-29 Units

## **Criminal Justice Minor**

The minor in Criminal Justice consists of five required courses and one additional course.

**All classes required for the minor must be completed with a grade of "C" (2.000) or above.**

### **Program Learning Outcomes**

Students who complete the program in Criminal Justice will be able to:

- Demonstrate comprehension of the theoretical and legal foundations of criminal justice
- Demonstrate knowledge of each of the components of the criminal justice system: the historical background, structure, function, and purpose.
- Demonstrate understanding and appreciation of the social realities, discriminations, and conflicts in the criminal justice system resulting from racial, socio-economic, and cultural inequities.
- Demonstrate ethical and professional behavior and apply critical thinking and problem-solving skills in an approved internship setting.

### **Lower-Division Requirements**

- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 209 - Introduction to Criminal Justice (3)

### **Upper-Division Requirements**

- SOC 310 - Criminology (3) **OR**
- SOC 314 - Juvenile Delinquency (3)
  
- SOC 360 - Race and Ethnicity (3)
  
- SOC 409 - Criminal Law (3) **OR**
- SOC 410 - Constitutional Foundations of Criminal Justice (3)

One of the following courses (3-4 units):

- SOC 305 - Social Stratification (3)
- SOC 320 - Social Psychology (3)
- SOC 350 - Urban Sociology (3)
- SOC 472 - Internship in Criminal Justice (2-4) **4 Units required**
- PSY 321 - Abnormal Psychology (3)

**Total: 18-19 Units**

## **Finance Minor**

A minor in Finance is for students who are interested in an understanding of finance concepts and applications, but who do not want to pursue a major in Finance.

## Lower-Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors **(3)**  
\*ACC201 and ACC202 sequence may be substituted for ACC200.

One (1) of the following:

- ECO 100 - Survey of Economics (GE) **(3)**
- ECO 101 - Principles of Macroeconomics (GE) **(3)**
- ECO 102 - Principles of Microeconomics (GE) **(3)**

Total: 6 Units

## Upper-Division Requirements

- FIN 335 - Business Finance **(3)**

Three (3) of the following:

- FIN 385 - Intermediate Finance **(3)**
- FIN 415 - Investments **(3)**
- FIN 425 - Financial Statement Analysis and Valuation **(3)**
- FIN 435 - International Finance **(3)**

Total: 12 Units

Total Minor: 18 Units

## French Minor

A minor in French is offered to those who wish to complement study in another discipline. Course work can only approximate a bilingual setting and does not necessarily guarantee appropriate language proficiency. Therefore, students are encouraged to immerse themselves in the target language and to complete more than the minimum amount of language classes.

## Requirements

- Undergo a complete summative evaluation of language skills by way of an exit interview.
- Successfully complete at least 9 upper-division units in residence.
- Successfully complete the following courses:

## Lower-Division Requirements

- FRE 101 - Elementary French I (GE) **(4)**
- FRE 102 - Elementary French II (GE) **(4)**

- FRE 250 - Intermediate French I (3)
- FRE 251 - Intermediate French II (3)  
OR Equivalent

Total: 14 Units

### Upper-Division Requirements

- FRE 303 - French Conversation (3)
- FRE 315 - French Culture and Civilization (3)
- FRE 320 - Survey of French Literature (3)
- FRE 325 - Francophone Literature (3)

Total: 12 Units

Total for Minor: 26 Units

### History Minor

A History minor, consisting of 18 units, is available for those in other majors who nevertheless desire to learn some of the skills and content available to History majors. The requirements are:

#### Requirements

- HIS 110 - World Civilizations I (GE) (3)
- HIS 111 - World Civilizations II (GE) (3)
- Upper-division Non-Western elective (4)
- Upper-division European elective (4)
- Upper-division American elective (4)

Total: 18 Units

### International Development Minor

A minor in International Development is for students who wish to complement study in another area with a basic background in economic development. Study in this discipline seeks to equip students in other majors to address the issues of material welfare that have an impact on their study of the issues facing disadvantaged populations.

#### Lower-Division Requirements

- SOC 201 - Cultural Anthropology (GE) (3) \*

Choose one (1) of the following:

- ECO 100 - Survey of Economics (GE) (3)

- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)

Total: 6 Units

Note(s):

*\*Fulfills the general education Social World requirement .*

### Upper-Division Requirements

- BUS 475 - Sustainability in Action (3)
- ECO 315 - Theories of Economic Development (3)
- MGT 470 - Nonprofit Organization Management (3)

Choose one (1) of the following:

- ECO 380 - Money and Banking (3)
- ECO 410 - International Economics (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- ECO 450 - History of Economic Thought (3)
- ECO 460 - Applied Econometrics (3)
- ECO 490 - Special Studies in Economics (3)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- MGT 382 - Applied Entrepreneurship (3)
- MGT 412 - Leadership Theory and Practice (3)
- POL 301 - Transitions to Democracy (4)
- POL 370 - Comparative Politics (4)
- POL 420 - United States Foreign Policy (4)
- POL 435 - Global Governance (4)
- SOC 360 - Race and Ethnicity (3)
- SOC 444 - Globalization and Culture (3)

Total: 12-13 Units

Minor Total: 18-19 Units

### Literature Minor

#### Lower Division Requirements

- LIT 200 - Literature and Culture (GE) (2)
- LIT 250 - Introduction to the Study of Literature (3)

Total Lower Division Units: 5

## Upper Division Requirements

- LIT 461 - Shakespeare (3)
- **One Course From:**
  - LIT 350 - World Literature (GE) (3)
  - LIT 351 - World Cinema (GE) (3)
  - LIT 352 - Diverse Voices in American Literature (GE) (3)
  - LIT 353 - Women Writers (GE) (3)
- *Two Additional Non-GE Upper Division LIT courses (6 units)*

Total Upper Division Units: 12

Total Units: 17

## Marketing Minor

A minor in Marketing is for students who are interested in an understanding of marketing concepts and applications, but who do not want to pursue a major in marketing.

## Lower Division Requirements

Choose two (2) of the following:

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*\*
- ECO 100 - Survey of Economics (GE) (3) \*  
or ECO 101 (3) Principles of Macroeconomics (GE)\*  
or ECO 102 (3) Principles of Microeconomics (GE)\*
- MGT 212 - Principles of Management (3)

Total: 6 Units

Note(s):

\* Fulfills the general education Social World Requirement.

\*\* The ACC201 and ACC202 sequence may be substituted for ACC200.

## Upper Division Requirements:

- MKT 332 - Principles of Marketing (3)

Choose three (3) of the following:

- MKT 333 - Consumer and Organizational Buying Behavior (3)

- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)
- MKT 350 - Social Media and Digital Marketing (3)
- MKT 432 - Marketing Research (3)

Total: 12 Units

Total Minor: 18 units

## **Mathematics Minor**

### Required Courses

- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 233 - Linear Algebra (3)

Choose 12 additional units from:

- MTH 242 - Number Theory with Proofs (2)
- MTH 274 - Calculus III (4)
- MTH 333 - Differential Equations (3)
- MTH 343 - Discrete Mathematics (3)
- MTH 352 - History of Mathematics (2)
- MTH 363 - Calculus Based Statistics With R (3) \*
- MTH 373 - Mathematical Modeling (3)
- MTH 383 - Mathematical Probability and Statistics (3) \*
- MTH 402 - Topics in Geometry (2)
- MTH 413 - Complex Analysis (3)
- MTH 424 - Real Analysis (4)
- MTH 444 - Abstract Algebra (4)
- MTH 471 - History of Mathematics Study Tour (1)
- MTH 492 - Special Topics in Mathematics (2)

Minor Total: 23 Units

Note(s):

\*Only one of these may be taken

## **Media Communication Minor**

### Core Requirements

- COM 150 - Introduction to Media Communication (3)

- COM 175 - Scriptwriting for Television and Film (3)
- COM 243 - Introduction to TV and Film Production (3)
- COM 275 - Audio Production (2)

Total: 11 Units

## Upper-Division Requirements

Choose twelve (12) units from the following courses:

- COM 300 - Narrative and Documentary Film (3)
- COM 350 - Electronic Media in Communication (3)
- COM 420 - Communication Practicum II (1-2)
- COM 425 - Advanced Television Workshop (1)
- COM 435 - Advanced Audio Production (1)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)
- COM 490 - Special Studies in Communication (1-3) (3) **Units required**

Total: 12 Units

Minor Total: 23 Units

## Music Minor

### Requirements

- MUH 101 - Introduction to Listening (GE) (2)
- MUT 120 - Music Theory I (4)
- *Applied study in instrument or voice* (2)
- *One-unit Ensembles* (2)
- *Additional upper-division units in Music* (8)
- MUH 333 - Music History and Literature III (2)
- OR
- MUH 334 - World Music (2)

Total: 21 Units

## Nonprofit Organization Management Minor

A minor in Nonprofit Organization Management is for students who wish to complement study in another area with a basic background in managing nonprofit organizations. The program is designed to acquaint the student with a few essentials of nonprofit organization management.

## Lower-Division Requirements

Choose two (2) of the following:

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*\*
- ECO 100 - Survey of Economics (GE) (3) \*  
or ECO 101 (3) Principles of Macroeconomics (GE)\*  
or ECO 102 (3) Principles of Microeconomics (GE)\*
- MGT 212 - Principles of Management (3)

Total: 6 Units

Note(s):

*\* Fulfills the general education Social World requirement.*

*\*\* ACC201 and ACC202 sequence may be substituted for ACC200.*

### Upper-Division Requirements

- BUS 475 - Sustainability in Action (3)
- MGT 412 - Leadership Theory and Practice (3)
- MGT 470 - Nonprofit Organization Management (3)

Choose one (1) of the following:

- ECO 315 - Theories of Economic Development (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- MGT 320 - Organizational Behavior (3)
- MGT 374 - Human Resource Management (3)
- MGT 382 - Applied Entrepreneurship (3)
- SOC 360 - Race and Ethnicity (3)
- SOC 444 - Globalization and Culture (3)

Total: 12 Units

Minor Total: 18 Units

### **Nutrition Minor**

The minor in Nutrition is for students interested in the field of nutrition and well-being. The program consists of a foundation in food, nutrition and disease prevention as it relates to one's health.

Twenty to twenty-one (20-21) units are required for this minor, including the following lower and upper-division courses:

### Lower-Division Requirements

- FCS 110 - Fundamentals of Food (2)

- FCS 150 - Human Development (3)
- FCS 225 - Fundamentals of Nutrition (3)

Total: 8 Units

### Upper-Division Requirements

- FCS 300 - Food Economics and Management (2)
- FCS 303 - Cultural Foods (2)
- FCS 305 - Life Cycle Nutrition (4)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)

Take one (1) additional course from the following:

- FCS 315 - Personal, Family, and Community Health (GE) (3)
- FCS 425 - Child and Adolescent Nutrition (3)
- FCS 435 - Food Service Production and Management (3)
- FCS 445 - Catering (2)

Total: 12-13 Units

Minor Total: 20-21 Units

### **Philosophy Minor**

#### Lower-Division Requirements

- PHL 201 - Introduction to Philosophy (GE) (3)

Total: 3 Units

#### Upper-Division Requirements

- PHL 301 - Plato and Aristotle (3)
- PHL 302 - Descartes through Hegel (3)
- **Nine (9) additional units in PHL of which six (6) units must be upper division**

Total: 15 Units

Minor Total: 18 Units

### **Physics Minor**

#### Requirements

- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)
- PHY 304 - Modern Physics (4)
- Eight additional upper-division units in Physics or Engineering.

Minor Total: 20 Units

## **Pre-Therapeutic Psychology Minor**

This minor is for non-Psychology majors who desire an introductory exposure to therapeutic psychology. It is especially suited for individuals who plan to enter careers in social services, i.e. ministry, nursing, medicine, or social work. Students minoring in this program complete the following courses.

### **Requirements**

- PSY 321 - Abnormal Psychology (3)

One course from the following:

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)
- PSY 103 - General Psychology (GE) (3)

One course from the following:

- PSY 325 - Clinical and Community Interventions (4)
- PSY 380 - Family Development and Family Therapies (3)

One course from the following:

- PSY 308 - Developmental Psychology – Birth Through Adolescence (4)
- FCS 150 - Human Development (3)

Three units from the following:

- PSY 315 - Positive Psychology (3)
- PSY 320 - Social Psychology (3)
- PSY 341 - Group Counseling (1-3) (Must be taken for 3 units)
- PSY 345 - Group Dynamics (3) (PSY341 is a pre-requisite)
- PSY 349 - Intimate Couples (3) (Must take with fiance or spouse)
- PSY 360 - Human Sexuality (3)

One course from the following:

- PSY 410 - Issues in Psychotherapy-Theology Integration (3)
- PSY 420 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) (4)

Minor Total: 18-21

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, and Modern Languages, and the Department of Communication and Theatre.

### **Requirements**

- MKT 332 - Principles of Marketing (3)
- COM 330 - Persuasion (3)
- COM 390 - Introduction to Public Relations (3)
- COM 405 - Public Relations Cases and Campaigns (3)
- JRN 250 - Introduction to Journalism (3)
- JRN 355 - Public Relations Writing (3)

Minor Total: 18 Units

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, and Modern Languages, and the Department of Communication and Theatre.

### **Requirements**

- MKT 332 - Principles of Marketing (3)
- COM 330 - Persuasion (3)
- COM 390 - Introduction to Public Relations (3)
- COM 405 - Public Relations Cases and Campaigns (3)
- JRN 250 - Introduction to Journalism (3)
- JRN 355 - Public Relations Writing (3)

Minor Total: 18 Units

## **Public Relations Minor**

The minor in Public Relations is an interdepartmental minor, shared by the Fermanian School of Business, the Department of Literature, Journalism, and Modern Languages, and the Department of Communication and Theatre.

### **Requirements**

- MKT 332 - Principles of Marketing (3)
- COM 330 - Persuasion (3)
- COM 390 - Introduction to Public Relations (3)
- COM 405 - Public Relations Cases and Campaigns (3)

- JRN 250 - Introduction to Journalism (3)
- JRN 355 - Public Relations Writing (3)

Minor Total: 18 Units

## **Science and Christian Faith Minor**

### Lower Division Requirements

- THE 250 - Introduction to Christian Theology (3)

Total: 3 units

### Upper Division Requirements

- CHU 395 - The Christian Tradition (GE) (3)
- THE 305 - Christian Faith and the Natural Sciences (3)
- THE 325 - The Human Person and Theology and Psychology (3)
- PHL 360 - Philosophy and the Sciences (3)
- **Choose three (3) additional upper division units from any THE, BIB, or CMI course.**

Total: 15 units

Minor Total: 18 units

## **Science Business Minor -Ecology Emphasis**

## **Science Business Minor-Chemistry Emphasis**

## **Science-Business Minor with Chemistry Emphasis**

### **Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MGT 212 - Principles of Management (3)

### **Choose one (1) course from the following:**

- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)

### **Choose one (1) course from the following:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 28-30 units**

**Upper Division Requirements:**

- MKT 332 - Principles of Marketing (3)
- **Choose three (3) additional courses from BUS or MGT300-499 for nine (9) units.**

**Total: 12 units**

Total Minor: 40-42 units

## Science-Business Minor (Business Majors)

The Science-Business minors, joint minors between the Fermanian School of Business and the Biology and Chemistry Departments, are for business students who are interested in pursuing business careers in innovative science-related industries such as biotechnology, medical device, and pharmaceutical. Three emphases are available:

- Molecular Emphasis
- Ecology Emphasis
- Chemistry Emphasis

## Science-Business Minor with Molecular Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- MGT 212 - Principles of Management (3)

**Choose one (1) course from the following:**

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)

**Choose one (1) course from the following:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 22-24 Units**

**Upper Division Requirements:**

- BIO 345 - Genetics (4)
- BIO 352 - Research Methodology (2)
- MKT 332 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 300-499 for three (3) units**

**Choose one (1) course from the following:**

- BIO 315 - Microbiology (3)
- BIO 350 - Advanced Cell Biology (3)
- BIO 380 - Molecular Biology (3)
- BIO 390 - Immunology (3) \*\*
- BIO 400 - Developmental Biology (3) \*\*
- BIO 410 - Vertebrate Biology (3)
- BIO 450 - Advanced Biochemistry (4)

\*\* With Biology department permission, BIO345 may substitute as this course pre-requisite.

**Total: 15 units**

Total Units: 37-39

## Science-Business Minor with Ecology Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)  
(BIO105 may be substituted with the permission of the Biology Department.)
- BIO 212 - Organismal Biology (3)
- MGT 212 - Principles of Management (3)

**Choose one (1) course from the following:**

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)

**Choose one (1) course from the following:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 21-23 units**

**Upper Division Requirements:**

- BIO 363 - Conservation Ecology (3)
- MKT 332 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 300-499 for three (3) units.**

**Choose two (2) courses from the following:**

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)

*The following Environmental Science/Biology courses could be taken at Au Sable or Costa Rica with our sister school (prior permission is required for any substitutions). The following courses can be used to transfer in these units:*

- EVS 396 - Advanced Biology (3)
- EVS 397 - Advanced Ecology (3)
- EVS 398 - Advanced Ecological Applications (3)

**TOTAL: 14-15 units**

Total Units: 35-38

## Science-Business Minor with Chemistry Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MGT 212 - Principles of Management (3)

**Choose one (1) course from the following:**

- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)

**Choose one (1) course from the following:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 28-30 units**

**Upper Division Requirements:**

- MKT 332 - Principles of Marketing (3)
- **Choose three (3) additional courses from BUS or MGT300-499 for nine (9) units.**

**Total: 12 units**

Total Minor: 40-42 units

### **Science-Business Minor (Science Majors - Biology Department)**

Science-Business Minor for Biology, Chemistry and Environmental (Science majors)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with business knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

- ACC 200 - Principles of Accounting for Non-Business Majors (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 345 - Genetics (4)
- CHE 294 - Organic Chemistry I (4)
- MGT 212 - Principles of Management (3)
- MKT 332 - Principles of Marketing (3)
- MTH 144 - Calculus With Applications (GE) (4)  
OR
- MTH 164 - Calculus I (GE) (4)

Select one course from:

- BUS 475 - Sustainability in Action (3)
  - MGT 320 - Organizational Behavior (3)
  - MGT 374 - Human Resource Management (3)
  - MGT 382 - Applied Entrepreneurship (3)
  - MGT 412 - Leadership Theory and Practice (3)
  - MGT 416 - Perspectives on Leadership (3)
  - MGT 470 - Nonprofit Organization Management (3)
  - MGT 484 - Operations Management (3)
- Plus one elective from BIO or CHE 300-499 for three (3) units.**

31 total units

### **Science-Business Minor (Science Majors - Chemistry Department)**

Science-Business Minor for Biology, Chemistry and Environmental (Science majors)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with business knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

- ACC 200 - Principles of Accounting for Non-Business Majors (3)

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 345 - Genetics (4)
- CHE 294 - Organic Chemistry I (4)
- MGT 212 - Principles of Management (3)
- MKT 332 - Principles of Marketing (3)
- MTH 144 - Calculus With Applications (GE) (4)  
OR
- MTH 164 - Calculus I (GE) (4)

Select one course from:

- BUS 475 - Sustainability in Action (3)
  - MGT 320 - Organizational Behavior (3)
  - MGT 374 - Human Resource Management (3)
  - MGT 382 - Applied Entrepreneurship (3)
  - MGT 412 - Leadership Theory and Practice (3)
  - MGT 416 - Perspectives on Leadership (3)
  - MGT 470 - Nonprofit Organization Management (3)
  - MGT 484 - Operations Management (3)
- Plus one elective from BIO or CHE 300-499 for three (3) units.**

31 total units

## Science-Business Minor Molecular Emphasis

## Science-Marketing Minor (Business Majors)

The Science-Marketing minors, joint minors between the Fermanian School of Business and the Biology and Chemistry Departments, are for business students who are interested in pursuing marketing careers in innovative science-related industries such as biotechnology, medical device, and pharmaceutical. Three emphases are available:

- Molecular Emphasis
- Ecology Emphasis
- Chemistry Emphasis

## Science-Marketing Minor with Molecular Emphasis

### Lower Division Requirements:

- ACC 201 - Principles of Financial Accounting (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

### Choose one (1) of the following courses:

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)

- CHE 152 - General Chemistry I (GE) (4)

**Choose one (1) of the following courses:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 19-21 units**

**Upper Division Requirements:**

- BIO 345 - Genetics (4)
- BIO 352 - Research Methodology (2)
- MKT 332 - Principles of Marketing (3)
- **Choose two (2) additional course from MKT300-459 for six (6) units.**

**Choose one (1) of the following courses:**

- BIO 315 - Microbiology (3)
- BIO 350 - Advanced Cell Biology (3)
- BIO 380 - Molecular Biology (3)
- BIO 390 - Immunology (3) \*\*
- BIO 400 - Developmental Biology (3) \*\*
- BIO 410 - Vertebrate Biology (3)
- BIO 450 - Advanced Biochemistry (4)

\*\* with Biology Department permission, BIO345 may substitute as this course pre-requisite.

**Total: 18 units**

Total Minor: 37-39 units

## Science-Marketing Minor with Ecology Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)  
(BIO105 may be substituted with the permission of the Biology Department).
- BIO 212 - Organismal Biology (3)

**Choose one (1) of the following courses:**

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)

**Choose one (1) of the following courses:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 18-20 units**

**Upper Division Requirements:**

- BIO 363 - Conservation Ecology (3)
- MKT 332 - Principles of Marketing (3)
- **Choose two (2) additional courses from MKT 300-459 for six (6) units.**

**Choose two (2) of the following courses:**

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 430 - Animal Behavior (3)

*The following Environmental Science/Biology courses could be taken at Au Sable or in Costa Rica with our sister school (prior permission is required for any substitutions). The following courses can be used to transfer in these units:*

- EVS 396 - Advanced Biology (3)
- EVS 397 - Advanced Ecology (3)
- EVS 398 - Advanced Ecological Applications (3)

**Total: 17-18 units**

Total Minor: 35-38 units

## Science-Marketing Minor with Chemistry Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)

**Choose one (1) from the following courses:**

- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)

**Choose one (1) from the following courses:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 25-27 units**

**Upper Division Requirements:**

- MKT 332 - Principles of Marketing (3)
- **Choose three (3) additional courses from MKT300-459 for nine (9) units.**

**Total: 12 units**

Total Minor: 37-39 units

### **Science-Marketing Minor (Science Majors - Biology Department)**

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with marketing knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

#### Science-Marketing Minor for Biology, Chemistry, and Environmental Science Majors

- ACC 200 - Principles of Accounting for Non-Business Majors (3)  
The ACC201 and ACC202 sequence may be substituted for ACC200.
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 345 - Genetics (4)
- MKT 332 - Principles of Marketing (3)

**Choose one (1) Mathematics course:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)

**Select two (2) courses from the following Marketing courses:**

- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)

Total Minor: 37 units

### **Science-Marketing Minor (Science Majors - Chemistry Department)**

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with marketing knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

#### Science-Marketing Minor for Biology, Chemistry, and Environmental Science Majors

- ACC 200 - Principles of Accounting for Non-Business Majors (3)  
The ACC201 and ACC202 sequence may be substituted for ACC200.
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 345 - Genetics (4)
- MKT 332 - Principles of Marketing (3)

**Choose one (1) Mathematics course:**

- MTH 144 - Calculus With Applications (GE) (4)

- MTH 164 - Calculus I (GE) (4)

**Select two (2) courses from the following Marketing courses:**

- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)

Total Minor: 37 units

## Science-Marketing Minor Chemistry Emphasis

### Science-Marketing Minor with Chemistry Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)

**Choose one (1) from the following courses:**

- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)

**Choose one (1) from the following courses:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 25-27 units**

**Upper Division Requirements:**

- MKT 332 - Principles of Marketing (3)
- **Choose three (3) additional courses from MKT300-459 for nine (9) units.**

**Total: 12 units**

Total Minor: 37-39 units

## Sociology Minor

The Sociology minor consists of a minimum of six courses from the list below (three from the required core and three electives). The student must select a minimum of 12 units of upper-division credits in Sociology and may include no more than three units of SOC 490 - Special Topics in Sociology.

**All classes required for the minor must be completed with a grade of "C" (2.000) or better.**

## Lower-Division Requirements

- SOC 101 - Introduction to Sociology (GE) (3)

## Upper-Division Requirements

- SOC 415 - Social Theory (3)
- SOC 260 - Sociological Analysis (3) \* **OR**
- SOC 460 - Social Research Methods and Design (4) \*

### Note(s):

\*Students who have completed a research methods course for their major--HIS 270, NSG 399, POL 270, PSY 390 and PSY 391--may substitute for SOC 260 or SOC 460.

### Select at least 9 units from the following:

- SOC 303 - Urban Issues (3)
- SOC 305 - Social Stratification (3)
- SOC 310 - Criminology (3) **OR**
- SOC 314 - Juvenile Delinquency (3)
- SOC 316 - Sociology of Aging (3)
- SOC 320 - Social Psychology (3)
- SOC 330 - The Development of Feminist Thought (WS) (4)
- SOC 350 - Urban Sociology (3)
- SOC 360 - Race and Ethnicity (3)
- SOC 375 - African Cultures and Histories (3)
- SOC 420 - Social Change (3)
- SOC 430 - Sociology of Religion (3)
- SOC 444 - Globalization and Culture (3)
- SOC 470 - Medical Sociology (3)
- SOC 475 - Sociology of Education (3)
- SOC 490 - Special Topics in Sociology (1-4) \*\*

### Note(s):

\*\*No more than three units of SOC 490 may count toward the 12 units of upper-division course work required for the minor.

**Total: 18-19 Units**

## Recommended Courses

- SOC 103 - Social Problems (GE) (3)

- SOC 201 - Cultural Anthropology (GE) (3)
- SOC 250 - Sociology of the Family (3)

## Software Engineering Minor

### Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)

### Upper Division Requirements

- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- MTH 343 - Discrete Mathematics (3)

### Choose One Course From:

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 322 - Data Management for Computational Science (2)

Total Units: 23

## Spanish Minor

A minor in Spanish is offered to those who wish to complement study in another discipline. Course work can only approximate a bilingual setting and does not necessarily guarantee appropriate language proficiency. Therefore, students are encouraged to immerse themselves in the target language and to complete more than the minimum amount of language classes.

### Lower Division Requirements:

- SPA 101 - Elementary Spanish I (GE) (4)
- SPA 102 - Elementary Spanish II (GE) (4)
- SPA 250 - Intermediate Spanish I (3)
- SPA 251 - Intermediate Spanish II (3)

### Upper Division Requirements:

- SPA 302 - Advanced Grammar and Reading (3)
- SPA 303 - Advanced Conversation and Composition (3)

Complete a total of two courses from two different categories below:

## Literature

- SPA 320 - Mexican American Literature and Culture (3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 400 - Peninsular Literature Before 1800 (3)
- SPA 402 - Peninsular Literature Since 1800 (3)
- SPA 437 - Latin American Literature Before 1910 (3)
- SPA 439 - Latin American Literature Since 1910 (3)

## Culture

- SPA 310 - Latin American Culture and Civilization (3)
- SPA 315 - Culture and Civilization of Spain (3)

## Linguistics

- SPA 390 - Current Spanish Linguistics (3)

Total: 26 Units

## Notes:

- Student will undergo a complete summative evaluation of language skills by way of an exit interview.
- Student will successfully complete at least 9 upper-division units in residency.

## **Sustainability Studies Minor**

This Sustainability Studies minor is an interdisciplinary program designed to help students develop a broad perspective on the issues and challenges of creation care and to acquire skills and tools for personally addressing those challenges. The minor consists of introductory courses in Biology, Sociology and/or Personal and Consumer Financial Management, and upper-division courses drawn from Sociology, Theology, Political Science, International Development, and Business, and a Sustainability practicum or internship experience. All of the courses in the minor will significantly address sustainability issues from the perspective of their respective disciplines.

## Requirements

Select one (1) course from the following:

- BIO 102 - Environment and People (GE) (4)
- BIO 105 - Ecology and Conservation (GE) (3)

Select one (1) course from the following:

- FCS 230 - Personal and Consumer Financial Management (2)
- SOC 103 - Social Problems (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)

Lower Division: 5-7 Units

Each of the following:

- BUS 475 - Sustainability in Action (3)
- THE 306 - The Life of Holiness (GE) (3)

Select Two 2 Course from the following:

- ECO 315 - Theories of Economic Development (3)
- MGT 470 - Nonprofit Organization Management (3)
- POL 360 - Urban Politics (4)
- POL 435 - Global Governance (4)
- POL 441 - Issues in Public Policy (4)
- SOC 444 - Globalization and Culture (3)

Upper Division: 12-14 Units

Internship, Practicum or Research Project

(Minimum of 40 hours work requirement; may be taken for credit)

- An Internship, Practicum or Research Project addressing sustainability (0-4) \*

Minor Total: 17-25 Units

Note(s):

\*The project must be approved by the Sustainability Studies minor advisor. It may consist of an experience (no formal course credit) with a local NGO or business on a sustainability project, or may be a for-credit course drawn from any major's internship, research project or practicum courses.

## **Theatre Minor**

### **Core Requirements**

- TRE 204 - Orientation to Theatre (3)
- TRE 270 - Acting I (3)

Lower-Division Total: 6 Units

Upper-Division Electives:

Choose 12 units from the following courses:

- TRE 304 - Theatre History (3)
- TRE 350 - Musical Theatre (3)
- TRE 354 - Movement I (3)
- TRE 370 - Acting II (3)
- TRE 436 - Stagecraft Techniques (2)
- TRE 437 - Lighting and Makeup Techniques (2)
- TRE 451 - Movement II (3)

Choose 2 units from the following:

- TRE 210 - Theatre Practicum I (1-2)  
and/or
- TRE 420 - Theatre Practicum II (1-2)

Upper-Division Total: 12 Units

Minor Total: 20 Units

## Women's Studies Minor

The minor in Women's Studies affirms the equality and value of women in the university community and curriculum. Significant women in the Wesleyan/holiness movement have consistently contributed to Christian feminism as a central principle of academic and church life. Point Loma has developed a sequence of courses of interest to both women and men that examines important gender issues across a wide variety of academic fields, in light of the university's commitment to the Christian faith.

The minor in Women's Studies is for students who wish to complement study in another area with an interdisciplinary study of women's status and contribution to the world. The program consists of an introductory course, a capstone course, and a selection of applied topics courses at the upper-division level.

Graduation with a minor in Women's Studies requires the following lower-division and upper-division courses:

### Women's Studies Minor

#### Lower-Division Requirements

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)

#### Upper-Division Requirements

- POL 330 - The Development of Feminist Thought (WS) (4)

A minimum of nine units from:

- COM 312 - Gender and Communication (WS) (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)

- HIS 475 - Topics in Women's History (WS) (4)
- LIT 353 - Women Writers (GE) (3)
- NSG 446 - Health of Women in a Multicultural World (WS) (3)
- NSG 447 - Family Violence (3)
- POL 415 - Women and Politics (WS) (4)

Total: 17 Units

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Graduation with a minor in Women's Studies requires the following lower-division and upper-division courses:

### Women's Studies Minor

#### Lower-Division Requirements

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)

#### Upper-Division Requirements

- POL 330 - The Development of Feminist Thought (WS) (4)

A minimum of nine units from:

- COM 312 - Gender and Communication (WS) (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)
- HIS 475 - Topics in Women's History (WS) (4)
- LIT 353 - Women Writers (GE) (3)
- NSG 446 - Health of Women in a Multicultural World (WS) (3)
- NSG 447 - Family Violence (3)
- POL 415 - Women and Politics (WS) (4)

Total: 17 Units

## Worship Arts Minor

## Lower Division Requirements

- CMI 155 - Christian Formation and Ministry (3)
- CMU 201 - Instruments in Worship (2)  
**OR**
- CMU 202 - Multi-Media for Worship Ministry (2)

Total: 5 units

## Upper Division Requirements

- CMI 345 - Enacting Worship (3)
  - CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- Choose two (2) course from the following:**
- BIB 378 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
  - CMI 300 - Teaching and Preaching the Bible (3)
  - CMI 325 - Christian Care of Souls (3)
  - CMU 314 - Music and Worship (3)
  - THE 330 - Christ and the Church (3)

Total: 12 units

Minor Total: 17 units

## Writing Minor

A minor in Writing is offered to those who wish to complement study in another discipline. The ability to write effectively and interpret written material skillfully makes Writing a marketable minor in all fields.

## Lower-Division Requirements

Select one course from the following:

- WRI 220 - Introduction to Creative Writing (3)
- JRN 250 - Introduction to Journalism (3)
- COM 175 - Scriptwriting for Television and Film (3)

## Upper-Division Requirements

- WRI 365 - Writing for Professional Careers (3)

Select three courses from the following:

- JRN 312 - Television News Writing (3) \*
- JRN 314 - Computer-Assisted Reporting (3) \*
- WRI 315 - Advanced English Composition (3)
- WRI 321 - Creative Writing: Poetry (3)
- WRI 322 - Creative Writing: Fiction (3)
- WRI 323 - Creative Writing: Creative Nonfiction (3)
- JRN 345 - Editing (3) \*
- JRN 355 - Public Relations Writing (3) \*
- WRI 370 - Writing Theory and Pedagogy (2) \*
- WRI 420 - Advanced Writing Workshop (3) \*
- JRN 440 - Magazine Editing and Concepts (3) \*
- WRI 490 - Special Studies in Writing/Journalism (1-3) \*
- LIN 312 - Introduction to Linguistics (3)
- LIN 365 - English Grammar and Usage (3)
- COM 414 - Long-Form Broadcast News (3) \*
- TRE 490 - Special Studies in Theatre (1-3) (with playwriting content)

Note(s):

*\*Course carries a pre-requisite.*

Select two units from the following:

- JRN 215 - Newspaper Workshop (1) \*\*
- WRI 216 - Literary Magazine Workshop (1) \*\*
- JRN 217 - Yearbook Workshop (1) \*\*

Note(s):

\*\*Each may be taken more than once (may substitute WRI 470 - Internship in Writing for two units of JRN 215/WRI 216/JRN 217).

Total: 16-17 Units

## **Youth and Family Ministries Minor**

### Lower Division Requirements

- CMI 155 - Christian Formation and Ministry (3)

Total: 3 units

### Upper Division Requirements

- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)

- CMI 415 - The Church of the Nazarene: History and Polity (3)
- CMI 425 - Youth and Family Ministry (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- FCS 310 - Early Childhood Education (4)
- OR
- FCS 313 - Adolescent Development in the Family Context (2)

Total: 17-19 units

Minor Total: 20-22 units

## Requirements

### First Year Experience

#### Required first year courses

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)

*At least three (3) units of College Composition must be completed in the student's first two semesters as a part of the First Year Experience program. Students with qualifying SAT B Writing scores of 670 or higher or ACT English score of 94% or higher will be placed in the three unit WR1120, Honors in College Composition Writing and Research. If these students prefer to take four (4) units of WR1110 rather than three (3) units of WR1120, they may opt out of WR1120 and take WR1110.*

- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) (4)
  - OR
  - WRI 116 - College Composition: Research - First Year Experience (GE) (2) \*
- \* WR1116 is for transfer students who have completed an additional approved WRI course or for students who have transferred in approved AP work.*

## General Education

The purpose of general education is to provide a common educational experience, to develop essential skills, and to provide a broad cultural background for personal and professional growth. The general education curriculum is listed under a four-fold division. This structure provides continuity with the Wesleyan approach to knowledge by emphasizing the human response as foundational to the developing, exploring, and seeking aspects of education. The divisions, although not mutually exclusive or all-encompassing, organize similar themes relevant to faith and learning. Each complements the others and, in each, conscious efforts are made to reveal connections, develop perspectives, and build synthetic thinking skills. These divisions are: Responding to the Sacred, Developing Cognitive Skills, Exploring an Interdependent World, and Seeking Cultural Perspectives.

### General Education Committee

The general education program is approved and sustained by the faculty under the direction of a faculty committee. The General Education Committee directs an on-going cycle of review and improvement based on established goals and objectives.

## General Education Prerequisites

Students are required to demonstrate basic competence in mathematics and writing based on standardized test scores. *Any remedial courses, numbered below 100, taken to satisfy competency requirements, are in addition to the minimum of 128 units required for graduation.*

## General Education Requirements

The specific requirements in general education, as established by the faculty, represent a broad-based experience in skills and ideas. The following selection of courses is designed to guide the student toward a liberalizing educational experience in the arts and sciences while allowing for substantial choice in the development of that education.

### I. First Year Experience

First Year Experience

### II. Responding to the Sacred

A study of Scripture and Christian heritage as foundational in the pursuit of knowledge and the development of personal values.

Students transferring to the university for the first time with 48 or more units, none of which are in religion, take only five units in this category at Point Loma Nazarene University (three of which must be at the upper-division level).

#### A. Biblical Foundations [2 courses; 5 units]

- BIB 101 - Old Testament History and Religion (GE) (2)
- BIB 102 - New Testament History and Religion (GE) (3)

#### B. The Christian Tradition [1 course; 3 units]

- CHU 395 - The Christian Tradition (GE) (3) **OR**
- THE 306 - The Life of Holiness (GE) (3)

### III. Developing Cognitive Abilities

*A pursuit of personal awareness and skill development, focusing on the analytical, communication, and quantitative skills necessary for successful living in modern society.*

#### A. Personal Development [1 course; 3 units]

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)  
*Required of all students who graduated from high school the year prior to enrollment at PLNU.*

All others take:

- PSY 103 - General Psychology (GE) **(3)**  
*Required of transfer students who do not fall within the high school graduation period listed above.*

## B. Critical Thinking and Communication [2 courses; 5-7 units]

*At least three (3) units of College Composition must be completed in the student's first two semesters as a part of the First Year Experience program.*

*All students must fulfill the composition requirement prior to the junior year.*

- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) **(4)**  
**OR**
- WRI 116 - College Composition: Research - First Year Experience (GE) **(2)** \*\*
- COM 100 - Principles of Human Communication (GE) **(3)**  
**OR**
- COM 231 - Argumentation and Debate (GE) **(3)**

Note(s):

*A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 097, along with WRI 110 or WRI 116.*

*\*\*WRI116 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

## C. Problem Solving [1 course; 3-4 units]

- MTH 144 - Calculus With Applications (GE) **(4) OR**
- MTH 164 - Calculus I (GE) **(4) OR**
- MTH 173 - Business Calculus (GE) **(3) OR**
- MTH 303 - Problem Solving (GE) **(3)**

## IV. Exploring an Interdependent World

An introduction to the natural and social sciences as tools for exploring the world, with emphasis on collecting and interpreting empirical data for both theoretical and practical purposes.

### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8 units]

Biological Science [1 course from this group]

- BIO 101 - Human Biology and Bioethics (GE) **(3) and**
- BIO 101L - Human Biology and Bioethics Laboratory (GE) **(1)**
  
- BIO 102 - Environment and People (GE) **(4)**
  
- BIO 103 - Introduction to Biology (GE) **(3) and**
- BIO 103L - Introduction to Biology Laboratory (GE) **(1)**

- BIO 104 - Biotechnology and Society (GE) (4)
- BIO 105 - Ecology and Conservation (GE) (3) **and**
- BIO 105L - Ecology and Conservation Laboratory (GE) (1)
- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

Physical Science [1 course from this group]

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 102 - Chemistry in our Everyday Lives (GE) (3) **and**
- CHE 102L - Chemistry in Our Everyday Lives Lab (GE) (1)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)
- PHY 113 - The Physics of Sound and Music (GE) (3) **and**
- PHY 113L - Physics of Sound and Music Lab (GE) (1)
- PHY 141 - General Physics I (GE) (4)
- PHY 241 - University Physics I (GE) (4)
- PSC 105 - The Cosmos (GE) (4)
- PSC 111 - Physical Science for Teachers (GE) (4)

B. Physical Fitness and Nutrition [2 courses; 3-5 units]

*One of the following courses is required:*

- PED 100 - Fitness Through Movement (GE) (2)
- PED 200 - Optimal Health (GE) (2)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- *Any one (1) unit activity course numbered PED 102-PED 184 **OR** one of the following is required:*
- PED 220 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 225 - Individual and Dual Sports (GE) (2)

C. The Social World [1 course; 3-4 units]

*One of the following in:*

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- POL 101 - Introduction to Political Science (GE) (3)

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 103 - Social Problems (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)

## V. Seeking Cultural Perspectives

*A survey of human endeavors from a historical, cultural, linguistic, and philosophical perspective, including developing critical appreciation of human expression—both artistic and literary.*

### A. The History of World Civilizations [2 courses; 6 units]

- HIS 110 - World Civilizations I (GE) (3)
- HIS 111 - World Civilizations II (GE) (3)

### B. The Fine Arts [2 courses from distinct areas; 4-5 units]

- ART 100 - Introduction to Art (GE) (2)
- ART 102 - Fundamentals of Art (GE) (3)
- ART 200 - History of Art I (GE) (3)
- ART 201 - History of Art II (GE) (3)
- MUH 100 - Introduction to Music (GE) (2)
- MUH 101 - Introduction to Listening (GE) (2)
- TRE 101 - Introduction to Theatre (GE) (2)

### C. Philosophy [1 course; 3 units]

- PHL 201 - Introduction to Philosophy (GE) (3)
- PHL 211 - Ethics (GE) (3)

Note(s):

B.S.N. candidates choose between two Literature options or one Literature and one Philosophy.

### D. Literature [2 courses; 5 units]

*Two courses; LIT200 and one upper division Literature course.*

Lower Division:

- LIT 200 - Literature and Culture (GE) (2)

Upper Division:

- LIT 350 - World Literature (GE) (3)
- LIT 351 - World Cinema (GE) (3)
- LIT 352 - Diverse Voices in American Literature (GE) (3)

- LIT 353 - Women Writers (GE) (3)

#### E. Foreign Language\* [2 courses; 8 units]

*One of the following sequences in the same language, all or part of which may be waived by examination or by petition when English is not the student's native language:*

- CHN 101 - Elementary Chinese (Mandarin) I (GE) (4)
- CHN 102 - Elementary Chinese (Mandarin) II (GE) (4)
- GER 101 - Elementary German I (GE) (4)
- GER 102 - Elementary German II (GE) (4)
- GRK 207 - Biblical Greek I (GE) (4)
- GRK 208 - Biblical Greek II (GE) (4)
- HEB 205 - Biblical Hebrew I (GE) (4)
- HEB 206 - Biblical Hebrew II (GE) (4)
- FRE 101 - Elementary French I (GE) (4)
- FRE 102 - Elementary French II (GE) (4)
- SPA 101 - Elementary Spanish I (GE) (4)
- SPA 102 - Elementary Spanish II (GE) (4)

\*Note(s):

A foreign language is not required for B.S.N. candidates.

Students who believe they may qualify for a language waiver are advised to make application no later than spring of the sophomore year (or in the semester transfer to PLNU) to avoid possible delay in graduation.

## **Humanities Honors Program General Education**

Students in the Humanities Honors Program must complete all General Education requirements as outlined below.

### Humanities Honors Program General Education Requirements

#### I. Humanities Core [3 courses; 5 units]

- HON 100 - Introduction to Christian Scholarship (GE) (1)
- HON 150 - Humanities Honors Abroad (GE) (3)
- HON 350 - Humanities Honors Integrative Seminar (GE) (1)

#### II. Responding to the Sacred

##### A. Biblical Foundations [2 courses; 5 units]

- HON 201 - Old Testament History and Religion (GE) (2)
- HON 202 - New Testament History and Religion (GE) (3)

#### B. The Christian Tradition [1 course; 3 units]

- HON 310 - Christianity in Global Perspective (GE) (3)

### III. Developing Cognitive Abilities

#### A. Personal Development [1 course; 3 units]

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)

#### B. Critical Thinking and Communication [1 course; 4 units]

- HON 101 - Rhetoric: Critical Communication (GE) (4)

#### C. Problem Solving [1 course; 3-4 units]

- MTH 144 - Calculus With Applications (GE) (4) **OR**
- MTH 164 - Calculus I (GE) (4) **OR**
- MTH 173 - Business Calculus (GE) (3) **OR**
- MTH 303 - Problem Solving (GE) (3)

### IV. Exploring an Interdependent World

#### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8-9 units]

##### Biological Science [1 course from this group]

- BIO 101 - Human Biology and Bioethics (GE) (3)  
**and**
- BIO 101L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 102 - Environment and People (GE) (4)
- BIO 103 - Introduction to Biology (GE) (3)  
**and**
- BIO 103L - Introduction to Biology Laboratory (GE) (1)
- BIO 104 - Biotechnology and Society (GE) (4)
- BIO 105 - Ecology and Conservation (GE) (3)  
**and**
- BIO 105L - Ecology and Conservation Laboratory (GE) (1)
- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

##### Physical Science [ 1 course from this group]

- CHE 101 - Chemistry and Society (GE) **(4)**
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) **(4)**  
**and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**
- CHE 152 - General Chemistry I (GE) **(4)**
- PHY 141 - General Physics I (GE) **(4)**
- PHY 241 - University Physics I (GE) **(4)**
- PSC 105 - The Cosmos (GE) **(4)**

## B. Physical Fitness and Nutrition [2 courses; 2-4 units]

*One of the following courses is required:*

- PED 100 - Fitness Through Movement (GE) **(2)**
- PED 200 - Optimal Health (GE) **(2)**
- FCS 315 - Personal, Family, and Community Health (GE) **(3)**

*Additionally, any one (1) unit activity course numbered PED102 - PED184 **OR** one of the following is required:*

- PED 220 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 225 - Individual and Dual Sports (GE) **(2)**

## C. The Social World [1 course; 4 units]

- HON 210 - Politics of Race, Class and Gender (GE) **(4)**

## V. Seeking Cultural Perspective

### A. Foundations in Humanities [3 courses; 12 units]

- HON 120 - Foundations in Humanities I: Ancient/Medieval (GE) **(4)**
- HON 220 - Foundations in Humanities II: Renaissance/Enlightenment (GE) **(4)**
- HON 320 - Foundations in Humanities III: 19th/20th Centuries (GE) **(4)**

### B. Philosophy [1 course; 3 units]

- HON 102 - Introduction to Philosophy (GE) **(3)**

### C. Foreign Language [2 courses; 8-9 units]

- SPA 101 - Elementary Spanish I (GE) **(4)**
- SPA 102 - Elementary Spanish II (GE) **(4)**
- FRE 101 - Elementary French I (GE) **(4)**
- FRE 102 - Elementary French II (GE) **(4)**
- GER 101 - Elementary German I (GE) **(4)**
- GER 102 - Elementary German II (GE) **(4)**

- HEB 205 - Biblical Hebrew I (GE) (4)
- HEB 206 - Biblical Hebrew II (GE) (4)
- GRK 207 - Biblical Greek I (GE) (4)
- GRK 208 - Biblical Greek II (GE) (4)

## Certificate

### Business Certificate

A certificate in Business is for students who are interested in an understanding of basic business (accounting, economics, management, and marketing) concepts and applications, but who do not want to pursue a minor or major in Business Administration.

### Certificate Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*  
\*ACC201 and ACC202 sequence may be substituted for ACC200.
- MGT 212 - Principles of Management (3)
- MKT 332 - Principles of Marketing (3)

Select one (1) of the following:

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)

Total: 12 Units

### Certificate in Intercultural Engagement at Community Classroom

The Certificate in Intercultural Engagement at Community Classroom is designed for students who want part of their academic experience to include a focused engagement in a multicultural setting that will nurture their Christian formation academically and vocationally.

### Certificate Requirements

Students pursuing the Certificate in Intercultural Engagement at Community Classroom must complete:

- Twenty (20) hours of co-curricular service learning . Ten (10) hours are built into each Community Classroom course.
- Complete six (6) units from the following Community Classroom courses when offered at City Heights. A Minimum of three (3) units must be unique to the certificate.

Choose six (6) units from the following:

- CHU 395 - The Christian Tradition (GE) (3)
- CMI 155 - Christian Formation and Ministry (3)
- CMI 350 - Church as a Witness to the World (3)
- PHL 211 - Ethics (GE) (3)
- SOC 360 - Race and Ethnicity (3)
- SPA 101 - Elementary Spanish I (GE) (4)
- SPA 102 - Elementary Spanish II (GE) (4)
- THE 306 - The Life of Holiness (GE) (3)

## **French Language Certificate**

A French Language Certificate is for students interested in...

### **Certificate Requirements**

- FRE 250 - Intermediate French I (3) \*
- FRE 251 - Intermediate French II (3)
- FRE 303 - French Conversation (3)

\* FRE101 and FRE102 are pre-requisites to FRE250.

Total Units for the Certificate: 9

## **Software Engineering Certificate**

### **Lower Division Requirements**

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)

### **Upper Division Requirements**

- CSC 312 - Operating Systems for Software Engineering Certificate (2)
- CSC 323 - Software Engineering (3)

Total units for the certificate: 16

## **Other Programs**

### **Multiple Subjects Teaching Credentials**

Cross-Disciplinary Studies: Teacher Education majors complete a 130-unit undergraduate degree program which includes four Education courses that are required for the Multiple Subjects Teaching Credential. Teacher Education

majors also have the option of applying the following credential courses (listed below) to their undergraduate degree if additional units are needed to fulfill the 130-unit requirement for the Bachelor's degree. These 400 level courses are cross listed with the 600 level credential courses, and cross listed courses cannot be repeated between the undergraduate and graduate programs. These courses represent the required courses for the California SB2042 Multiple Subjects Teaching Credential. At the point that the 130-unit requirement is fulfilled, the candidate would apply to the Graduate School of Education and complete the remaining courses required for the credential post-baccalaureate.

Students desiring to enroll in the Multiple Subjects credential courses listed below would need to make application to the Teacher Education program, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching.

\*The following courses may be used for credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

*Prerequisites: Completion of all Cross-Disciplinary Studies: Teacher Education major courses.*

## Requirements

- EDU 409 - Classroom Assessment and Research Practices **(3)**
- EDU 420 - Literacy Instruction for Secondary Teachers **(3)**
- EDU 420F - Fieldwork for Methods of Teaching Reading and Writing **(0.5) \***
- EDU 422 - Interdisciplinary Approaches to Teaching in the Content Areas **(3)**
- EDU 440 - Elementary Clinical Practice I **(4)**
- EDU 460 - Elementary Clinical Practice II **(4)**
- EDU 4CP1 - Elementary Clinical Practice Seminar I **(1)**
- EDU 4CP2 - Elementary Clinical Practice Seminar II **(1)**

Note(s):

*\*Requires 20 hours of classroom fieldwork that requires teaching of reading in a small group*

## Special Program Information

### Honors Scholars Program

Near the end of the junior year, a student who has demonstrated exceptional scholarship and capacity for serious and creative study or research, and who has maintained a 3.500 cumulative GPA, may apply for entry into the Honors Scholars program. With the guidance of a faculty mentor, and in community with other Honors Scholars, the student will complete an honors project during the senior year. Successful scholars will receive special recognition at commencement ceremonies and on the university transcript of record. Criteria, qualifications, and procedures are available in the Wesleyan Center, located on the second floor of Smee Hall.

Students who are accepted into the Honors Scholars program register in the fall semester for HON 498 (two units), as listed below. This represents the initial phase of work on the required project. In the spring of the senior year, students register for HON 499 (one unit) in order to complete the project.

- HON 498 - Honors Project I
- HON 499 - Honors Project II

## Teaching Credentials

*Conni Campbell, Advisor*

Courses necessary to satisfy the requirements for the following teaching credentials are offered. The requirements presented in the School of Education section are in addition to the requirements for the baccalaureate major.

- Single-Subject Teaching Credential - 2042 (Secondary) (Teacher Education)
- Multiple-Subject Teaching Credential - 2042 (Elementary) (Teacher Education)
- Special Education Teaching Credential - Mild/Moderate and Moderate/Severe

## Pre-Professional and Cooperative Programs

### Engineering

**Paul Schmelzenbach, Advisor**

Three options are open to students who wish to work toward a degree in some branch of engineering.

- Those interested in engineering with an electronics emphasis such as electrical, hardware or systems engineering may choose to earn a degree in Engineering Physics at Point Loma Nazarene University (see Department of Physics and Engineering).
- Those interested in pursuing further study towards a M.S. degree in engineering may also choose to earn a degree in Engineering Physics at Point Loma Nazarene University (see Department of Physics and Engineering).
- Those choosing a B.S. level professional degree in other branches of engineering may choose to take two or three years of basic course work at this university followed by a transfer to an engineering school of their choice.

Interested students may seek counsel from the Engineering advisor.

### Pre-law

**Kelli McCoy, Advisor**

Students from all majors who are considering a legal career should contact the Pre-Law Advisor to receive the most current information about how best to prepare for law school. Pre-Law advising is designed to provide all interested students with the information and support they need to successfully apply to law school. The Pre-Law Advisor is available for individual consultation with students and also hosts events each semester aimed at providing information and networking opportunities to all PLNU students who are considering law-related careers.

There is no "Pre-Law Major" or list of required courses, since the American Bar Association and almost all ABA-approved law schools discourage such programs. Instead, PLNU's Pre-Law advising focuses on assisting students of any major with information on the best preparation for law school, including: the Law Schools Admissions Test (LSAT), application procedures and strategies, internships, the bar exam, and practice and placement issues.

Our Pre-Law advising particularly encourages networking with legal professionals and provides multiple opportunities for doing so in small-group settings. Guests include law school admissions officers, practicing attorneys, judges, and others involved in legal careers. Students considering going to law school should contact the Pre-Law Advisor early in their academic career to ensure that they are on the invitation list for all of the Pre-Law events.

### Pre-medical/Pre-dental/Pre-veterinary/Pre-pharmacy/Pre-optometry

### **Sara Yu Choung, Advisor**

Students may prepare themselves for admission to educational institutions specializing in the health professions by pursuing a four-year program of study as suggested by the Pre-Health Professions Advisor. These schools make no requirements regarding the choice of major for students preparing for the health professions but encourage a broad liberal arts background in the humanities, social and behavioral sciences, natural sciences, and mathematics. Most students interested in careers in the health professions at Point Loma choose to major in the natural sciences. If students choose a major other than these, they must be prepared to do especially well in science courses. In addition to a bachelor's degree, the specific requirements for admission into health professions programs varies by program, but generally include one year each of general chemistry, organic chemistry, biology, and physics, and one semester of biochemistry and calculus. Many also require a course in statistics and expect or require more than a minimum number of credits in biology.

A Pre-Health Professions Committee of the faculty follows the progress of each student and is available to advise the student and write recommendations when the student applies to educational institutions for the health professions, usually during the summer after the junior or senior year. The Pre-Health Program is designed to aid and encourage student candidates through a visiting speaker program, orientation meetings, suggestions in preparing for entrance exams, practice interviews, special experiences such as research opportunities, and critiques of application materials. Prospective students are advised that high grades and entrance exam scores are essential. Participation in the committee process is required for all pre-health students.

## **Pre-Physical Therapy and Allied Health**

### **Leon M. Kugler and Rebecca J. Flietstra, Co-advisors**

Students of various academic majors intending to attend physical therapy school must prepare adequately for the rigors of graduate school and groom themselves for the application process. Interested students will receive advisement on accredited programs, prerequisites, and admission standards. The advisors assist in internship placement, preparation for the application process including letter of recommendation decisions and the admission interview paradigm. Graduate Record Examination (GRE) preparation strategies and course sequence advising are offered. Prospective students are advised that high grades and entrance exam scores are essential.

Interaction with professionals in the physical therapy and medical fields is encouraged through two or three clinical internship placements, the first of which occurs as early as the second semester of the sophomore year, the biannual distinguished lecture series, contact with the university sport team physician and original research leading to Honors Scholar status at graduation. These interactions are beneficial to personal and pre-professional development and enhance the prospect of graduate school admission.

## **AFROTC, AROTC, and NROTC Programs**

### **Scott N. Shoemaker, Advisor**

Two- to four-year programs in Air Force, Army, and Navy Reserve Officer Training Corps, are offered in cooperation with San Diego State University and the University of San Diego. Upon completion of the program and all requirements for a bachelor's degree, cadets are commissioned as second lieutenants in the Air Force, Army, and Marines, and as Ensigns in the Navy. In addition to the leadership courses listed on the admissions office website, students are typically required to take a four to six-week Field Training Camp or cruise during the summer. Further information on these programs may be obtained from the ROTC advisor at Point Loma Nazarene University or from the Aerospace Studies Department, 619-594-5545, and the Military Science Department, 619-594-4943, at San Diego State University or the Department of Naval Science, 619-260-2288, at the University of San Diego.

## **Study Abroad Programs**

In an ever-changing and interdependent global community, Point Loma Nazarene University recognizes the value of providing for students the opportunity to live, learn, and engage in service in another culture. Such an experience

allows students to expand their appreciation and understanding of other world cultures. It also strengthens their abilities to become global citizens.

In recognition and strong support of Point Loma Nazarene University's mission and core values, the Office of Global Studies actively encourages all students to participate in learning opportunities overseas for an academic year, semester or summer term, or with a designated domestic program. It works with the PLNU community to develop a global perspective in its study abroad curriculum and promotes academic integration in all the programs.

In addition to the programs listed on the Office of Global Studies website, which have been approved to offer PLNU course credit, the Office of Global Studies offers a selected group of programs through affiliated universities and program providers. Students applying to study abroad enroll by registering with the Office of Global Studies. All students must determine, in advance, with the approval of their faculty advisors and the Director of Study Abroad, how courses taken through these programs will be applied to their specific graduation requirements. Furthermore, students must consider the implications of studying abroad on university-funded scholarships and financial aid. Program information and application materials may be obtained online at the Office of Global Studies website, via e-mail at [studyabroad@pointloma.edu](mailto:studyabroad@pointloma.edu), by telephone at 619-849-2972, or by visiting the Office of Global Studies.

To maintain a high academic standard, our programs require a minimum cumulative GPA of 2.5 or higher. Students who are on academic or disciplinary probation, or those who are not cleared by the Dean of Students, are not eligible to participate in study abroad programs. Grades earned through OGS-designated affiliate or non-OGS programs are neutral and, as such, not included in PLNU GPA calculation. Grades earned through OGS-designated partner programs are included in PLNU GPA calculation (students should confirm affiliate and partner school designations with the Office of Global Studies).

## **Academic Co-curricular**

Co-curricular activities in the area of Academic Affairs include, but are not limited to, the following: a nationally ranked forensic team; the annual Sunset Cliffs National Forensics Tournament hosted by the university; California Board of Registered Nursing-approved continuing education courses; the Phi Alpha Theta society for pre-law students; the Point Loma String Project; a wide variety of activities directed by the Fermanian Business and Economic Institute; and student summer research in biology, chemistry, mathematics, computer information systems, and computer sciences.

Other opportunities directly or indirectly related to specific majors and programs include a host of ensembles in the Department of Music such as Chorale, Concert Choir, Point Loma Singers, Choral Union, Chamber Orchestra, Concert Band, and Jazz Band; Urban Term, an intentional living community studying local urban issues in the context of ethnic diversity and low-income environments; radio station KPLR and the university television station, supported by the Department of Communication and Theatre; international study trips sponsored by the Center for International Development; summer marketing research, an honors program in the Fermanian School of Business; and an annual series of literary teas, Poetry Day, and a writer's symposium featuring nationally known personalities, sponsored by the Department of Literature, Journalism, and Modern Languages.

## **Learning Experiences for Academic Progress (LEAP)**

Learning Experiences for Academic Progress (LEAP) provides a small group of freshmen with a year of selected activities, structured academic programming, and on-campus support services in order to increase academic success, retention, and degree attainment. The LEAP experience is designed to assist students with the transition from high school into a four-year, residential environment by providing a network of educational, personal, social, and spiritual support for one academic year. The year-long Freshman Studies Seminar (FST 100, FST 101) focuses on study skills, motivational issues, and the institutional and personal resources that can contribute to academic success. Although LEAP students do not participate in ROTC or intercollegiate athletics, they do participate in the purposeful and holistic co-curricular opportunities incorporated into LEAP, in addition to curricular programming and academic enrichment. Faculty members, along with professionals from Academic Advising, Engagement and Retention, and Residential Life,

serve as advocates and facilitators to encourage students to achieve their educational goals. The program places a significant emphasis on the university-level writing and reasoning skills necessary to promote student learning.

LEAP students who fail to meet certain academic standards may be subject either to disqualification or administrative withdrawal.

### **Course Load in LEAP.**

The academic course load for LEAP students is a maximum of 14 units in the fall semester, and 14-17 units in the spring semester, based on a student's fall GPA:

- LEAP students whose fall GPA stands between 1.800 and 2.799 will carry a maximum spring load of 14 units.
- LEAP students whose fall GPA is 2.800 or greater will carry a maximum spring load of 17 units.

**Disqualification.** LEAP students may be disqualified during either fall or spring semesters.

- In fall semester, LEAP participants who receive grades of C- or better in FST 100 and WRI 101 but whose cumulative GPA falls below 1.800 will be disqualified.
- In spring semester, LEAP students who receive a grade of C- or better in FST 101, but whose cumulative GPA falls below 2.000 will be disqualified.

LEAP students who are disqualified will receive a letter from the Vice Provost of Academic Administration indicating they have been disqualified from continuing at the university. To be considered for readmission, LEAP students who are disqualified must:

- spend at least one regular semester away from the university (summer is not considered a regular semester);
- take 12 pre-approved units at another institution;
- present official transcripts that demonstrate a university cumulative GPA of 2.000 or above;
- meet with the Vice Provost for Academic Administration; and
- complete an application for readmission.

If readmitted, such students would sign a proposed Academic Improvement Plan, return on Academic Probation and enroll in a maximum of 13 units in their first semester back to allow deep concentration on a lighter class schedule.

**Administrative Withdrawal.** LEAP students may be disqualified at the end of either fall or spring semester.

- In fall semester, LEAP participants who receive grades of lower than C- in FST 100 or WRI 101 and whose cumulative GPA falls below 1.800 will be administratively withdrawn.
- In spring semester, LEAP participants who receive a grade of lower than C- in FST 101 and whose cumulative GPA falls below 2.000 will be administratively withdrawn.

LEAP students who are administratively withdrawn will receive a letter from the Vice Provost of Academic Administration indicating they have been administratively withdrawn from continuing at the university. Although this withdrawal action offers no opportunity for appeal or readmission to LEAP, administratively withdrawn LEAP students who wish to do so can reapply directly through the Office of Admissions once they have completed 24 or more transferable units at another institution with a 2.800 or higher cumulative GPA.

## **Graduation Requirements**

## **General Requirements**

Undergraduate students all share certain general requirements for earning the baccalaureate degree (B.A., B.S. Bus. Admin, B.Mus., B.S.N., and B.S.). These include the following:

- Freshman and students transferring in 56 credits or fewer must complete all requirements for the degree within 7 years of initial matriculation. Students transferring in 57 credits or more must complete all requirements for the degree within 4 years of initial matriculation.
  - Filing an application for advancement to degree candidacy with the Office of Records.
  - Satisfactory completion of a total of a minimum of 128 semester units (numbered 100 and above) with a minimum cumulative grade-point average of 2.000.
  - Satisfactory completion of all general education requirements.
  - Completion of an approved program of study in a major area with the minimum number of upper-division units and a minimum cumulative grade-point average of 2.000 unless stipulated higher.
  - If a minor is declared, a minimum GPA of 2.000 unless stipulated higher.
  - Residency at the university during the final 24 semester units of study (not applicable to PLNU-sponsored study abroad).
  - Fulfillment of all academic and institutional requirements and obligations.
  - Payment in full of all financial obligations to the university, including a graduation fee.
1. **Candidacy for a Degree.** An application for advancement to candidacy for a degree must be filed after the student has completed at least 92 semester units of work and has an approved program of study. Although students may view an unofficial advising guide on the website, an official "Graduation Check" is conducted by the Office of Records which subsequently communicates with the degree applicant regarding appropriate details. A special application must be made, and a fee paid, for students who must attend a final summer session in order to complete all requirements for graduation (see below under Graduation Fees).
  2. **Semester Units.** A minimum cumulative grade-point average of 2.000 is required for graduation. None of the minimum 128 semester units required for the baccalaureate degree may include those taken at the remedial level (numbered below 100).
  3. **General Education.** Students must meet the stated requirements in general education, a broad-based liberalizing experience in the arts and sciences. Transfer students are responsible to make sure any course work done prior to admission to the university fulfills the categories that are unique to PLNU.
  4. *Completion of the Major.* All major programs of study are sanctioned by the Point Loma faculty and listed in detail in this Catalog. Of the units completed in a major, at least 24 must be taken at the upper-division level (numbered 300 and above). In addition, a minimum of one-half of the upper-division units in the major must be completed in residence. A 2.000 cumulative grade-point average is required for all academic majors. An academic minor, though available in various academic areas, is not a requirement for graduation.
  5. **Residency.** Candidates for the baccalaureate degree must be in residence during the final 24 units applied toward the degree. A minimum of one-half of the upper-division units in the major also must be taken in residence. Exceptions are granted only by petition to the Vice Provost for Academic Administration.

## Completion of All Requirements

Commencement convocation is two times a year, at the close of the fall and spring semesters. All work taken toward a degree must be completed in full before a student can participate in commencement ceremonies. Likewise, the awarding of a diploma is dependent on clearance by a variety of university offices and services, such as Residential Life, Student Accounts, and Ryan Library. Degrees are posted in the semester of final registration and/or completion of final requirements.

Students petitioning to be allowed to participate in the bi-annual commencement convocation and complete their graduation requirements in the final summer session may not be deficient by more than nine (9) units. A completed application for summer graduation must be filed with the Office of Records including an action plan that is a binding contract of work to be completed. Approval by the Vice Provost for Academic Administration and fee payment constitute final approval.

## Graduation Fees

All students eligible for graduation are charged a fee. This fee is applied to the student's account and is non-refundable. The fee is charged regardless of whether the student participates in the commencement ceremonies or is not currently studying in residence. Students who find it necessary to file an Application for Summer Graduation pay an additional special fee. This fee is refundable only if all requirements are met satisfactorily by the conclusion of the summer (with all official documentation filed no later than October 1), according to the application agreement as approved by the Vice Provost for Academic Administration.

## Final Clearance

In order to receive final approval for participation in commencement activities, students must resolve any outstanding charges of fees or misconduct. The university does not guarantee the awarding of a diploma or degree.

## Bachelor of Science in Nursing Degree

The requirements for the Bachelor of Science in Nursing (B.S.N.) degree are the same as for the other baccalaureate degrees except that no foreign language is required and students may choose between a second literature course or a philosophy course. A larger concentration of work is required in the Nursing major.

## Second Baccalaureate Degree

A second baccalaureate degree may be earned at Point Loma Nazarene University. After applying for re-admission, a minimum of 32 units must be completed. Twenty-four of these units must be taken at the 300 level or above. A minimum of 24 units must be earned in the new major, with no duplication of units from a previous major. Twenty-four units must be taken in residence at PLNU. All general education (if different from first degree), the additional major, and specific academic major requirements for the second degree must be met. Candidates for a second degree are eligible for honors at graduation and for the Dean's List but not for a repetition of membership in Phi Delta Lambda. The second baccalaureate degree is distinguished from multiple majors within a first degree.

## Graduation Honors

**Honoris Causa.** The university occasionally grants honorary degrees to worthy recipients, as recommended by the President to the Board of Trustees.

*Graduation with Latin Honors.* The university recognizes academic excellence with the following honors designation based exclusively on the residential grade-point average (GPA earned in residence at PLNU):

- **Summa cum Laude** (highest honors), 3.900 and above
- **Magna cum Laude** (high honors), 3.700 to 3.899
- **Cum Laude** (honors), 3.500 to 3.699

Honors, designated on diplomas, require a minimum of 48 residential units after all course work has been completed for the degree. To be considered for honors a student also must have a cumulative minimum grade-point average of 3.500, including all transfer work. Grades earned through OGS-designated affiliate or non-OGS programs are neutral and, as such, not included in this calculation. Grades earned through OGS-designated partner programs are included in PLNU GPA calculation (students should confirm affiliate and partner school designations with the Office of Global Studies).

**The university announces unofficial honors during the commencement ceremony using these calculations and based on a minimum of 48 residential units earned by the conclusion of the previous semester. Official honors are posted with the degree.**

## The Honors Scholars Program

Special recognition is given to successful scholars during commencement ceremonies, on diplomas, and official transcripts of record. Criteria, qualifications, and procedures for graduating with this distinction are available in the Wesleyan Center. See "Honors Scholars Program" in this Catalog.

## Baccalaureate Degree Information

Point Loma Nazarene University offers a wide range of majors, minors, and concentrations within four baccalaureate categories: the Bachelor of Arts (B.A.), the Bachelor of Science (B.S.), the Bachelor of Science in Nursing (B.S.N.), and the Bachelor of Music (B.Mus.). All programs of study reflect PLNU's **mission and core values to engage and challenge minds, to model and form character, and to express our faith in service**. As such, each of the baccalaureate degrees listed above shares the core commitments of a liberal arts education. Each baccalaureate degree meets specific student needs and is characterized by a balance of general education courses and content-specific offerings. All baccalaureate degrees follow policies, standards, and student learning outcomes set by the university faculty and respected accrediting agencies, such as the total semester units required, upper-division level minimums, and optional minors where applicable.

The nature of the content and focus of B.S.N. and B.Mus. programs may be self-evident and share much in common with similar designations at other institutions. The distinctions between the B.A. and the B.S. degrees, however, are less specific within academe with each institution attempting a definition consistent with its mission and purpose. The faculty at Point Loma has therefore determined to reserve to itself the appropriate definition of arts and sciences baccalaureate programs.

For most of PLNU's history, the B.A. degree has been the most prominent in the university's liberal arts tradition. Generally speaking, the B.A. degree can be characterized by a concern for more breadth of subject material, a more extensive distribution of requirements, fewer designated-content units, an increased opportunity for electives outside the declared major, and enhanced capacity for mobility from one program to another. As a reflection of these characteristics, B.A. programs of study **are generally** smaller in size. The faculty has established **that a typical B.A. degree have no more than 49 units beyond general education requirements. Exceptions to the number of units allowable are based on discipline-specific criteria or on requirements set by external accrediting agencies.**

The Bachelor of Science (B.S.) degree is generally characterized by increased units of study in the major field and related areas; an increase in the total number of required units in the program; in-depth scientific, technical, or professional study; attention to scientific methodologies; a more developed pattern of course sequencing; and a relatively greater degree of specialization. As a reflection of these characteristics, B.S. programs of study tend to be larger than B.A. programs. The faculty has established **that a typical B.S. degree have no more than 59 units beyond general education requirements. Exceptions to the number of units allowable are based on discipline-specific criteria or on requirements set by external accrediting agencies.**

All baccalaureate programs listed above are designed in service of a defined set of student learning outcomes that state the anticipated results of completing the degree program. These programmatic learning outcomes are consonant with the broader institutional learning outcomes that flow out of PLNU's mission and core values.

## Colleges, Schools and Departments

## Index of Offerings

The following pages offer a complete summary of teaching/learning content areas with department/school general information, degree requirements (including majors and minors offered), and course descriptions. They are in the order listed below.

# Point Loma Nazarene University

## Requirements

### General Education

The purpose of general education is to provide a common educational experience, to develop essential skills, and to provide a broad cultural background for personal and professional growth. The general education curriculum is listed under a four-fold division. This structure provides continuity with the Wesleyan approach to knowledge by emphasizing the human response as foundational to the developing, exploring, and seeking aspects of education. The divisions, although not mutually exclusive or all-encompassing, organize similar themes relevant to faith and learning. Each complements the others and, in each, conscious efforts are made to reveal connections, develop perspectives, and build synthetic thinking skills. These divisions are: Responding to the Sacred, Developing Cognitive Skills, Exploring an Interdependent World, and Seeking Cultural Perspectives.

### General Education Committee

The general education program is approved and sustained by the faculty under the direction of a faculty committee. The General Education Committee directs an on-going cycle of review and improvement based on established goals and objectives.

### General Education Prerequisites

Students are required to demonstrate basic competence in mathematics and writing based on standardized test scores. *Any remedial courses, numbered below 100, taken to satisfy competency requirements, are in addition to the minimum of 128 units required for graduation.*

### General Education Requirements

The specific requirements in general education, as established by the faculty, represent a broad-based experience in skills and ideas. The following selection of courses is designed to guide the student toward a liberalizing educational experience in the arts and sciences while allowing for substantial choice in the development of that education.

#### I. First Year Experience

First Year Experience

#### II. Responding to the Sacred

A study of Scripture and Christian heritage as foundational in the pursuit of knowledge and the development of personal values.

Students transferring to the university for the first time with 48 or more units, none of which are in religion, take only five units in this category at Point Loma Nazarene University (three of which must be at the upper-division level).

##### A. Biblical Foundations [2 courses; 5 units]

- BIB 101 - Old Testament History and Religion (GE) (2)

- BIB 102 - New Testament History and Religion (GE) (3)

#### B. The Christian Tradition [1 course; 3 units]

- CHU 395 - The Christian Tradition (GE) (3) **OR**
- THE 306 - The Life of Holiness (GE) (3)

### III. Developing Cognitive Abilities

*A pursuit of personal awareness and skill development, focusing on the analytical, communication, and quantitative skills necessary for successful living in modern society.*

#### A. Personal Development [1 course; 3 units]

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)  
*Required of all students who graduated from high school the year prior to enrollment at PLNU.*

All others take:

- PSY 103 - General Psychology (GE) (3)  
*Required of transfer students who do not fall within the high school graduation period listed above.*

#### B. Critical Thinking and Communication [2 courses; 5-7 units]

*At least three (3) units of College Composition must be completed in the student's first two semesters as a part of the First Year Experience program.*

*All students must fulfill the composition requirement prior to the junior year.*

- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) (4)  
**OR**
- WRI 116 - College Composition: Research - First Year Experience (GE) (2) \*\*
- COM 100 - Principles of Human Communication (GE) (3)  
**OR**
- COM 231 - Argumentation and Debate (GE) (3)

Note(s):

*A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 097, along with WRI 110 or WRI 116.*

*\*\*WRI116 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

#### C. Problem Solving [1 course; 3-4 units]

- MTH 144 - Calculus With Applications (GE) (4) **OR**
- MTH 164 - Calculus I (GE) (4) **OR**
- MTH 173 - Business Calculus (GE) (3) **OR**
- MTH 303 - Problem Solving (GE) (3)

## IV. Exploring an Interdependent World

An introduction to the natural and social sciences as tools for exploring the world, with emphasis on collecting and interpreting empirical data for both theoretical and practical purposes.

### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8 units]

#### Biological Science [1 course from this group]

- BIO 101 - Human Biology and Bioethics (GE) **(3) and**
- BIO 101L - Human Biology and Bioethics Laboratory (GE) **(1)**
  
- BIO 102 - Environment and People (GE) **(4)**
  
- BIO 103 - Introduction to Biology (GE) **(3) and**
- BIO 103L - Introduction to Biology Laboratory (GE) **(1)**
  
- BIO 104 - Biotechnology and Society (GE) **(4)**
  
- BIO 105 - Ecology and Conservation (GE) **(3) and**
- BIO 105L - Ecology and Conservation Laboratory (GE) **(1)**
  
- BIO 130 - Human Anatomy and Physiology I (GE) **(4)**
- BIO 210 - Cell Biology and Biochemistry (GE) **(4)**
- BIO 211 - Ecological and Evolutionary Systems (GE) **(4)**

#### Physical Science [1 course from this group]

- CHE 101 - Chemistry and Society (GE) **(4)**
  
- CHE 102 - Chemistry in our Everyday Lives (GE) **(3) and**
- CHE 102L - Chemistry in Our Everyday Lives Lab (GE) **(1)**
  
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) **(4)**  
**and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**
  
- CHE 152 - General Chemistry I (GE) **(4)**
  
- PHY 113 - The Physics of Sound and Music (GE) **(3) and**
- PHY 113L - Physics of Sound and Music Lab (GE) **(1)**
  
- PHY 141 - General Physics I (GE) **(4)**
- PHY 241 - University Physics I (GE) **(4)**
- PSC 105 - The Cosmos (GE) **(4)**
- PSC 111 - Physical Science for Teachers (GE) **(4)**

### B. Physical Fitness and Nutrition [2 courses; 3-5 units]

*One of the following courses is required:*

- PED 100 - Fitness Through Movement (GE) (2)
- PED 200 - Optimal Health (GE) (2)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- *Any one (1) unit activity course numbered PED 102-PED 184 OR one of the following is required:*
- PED 220 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 225 - Individual and Dual Sports (GE) (2)

### C. The Social World [1 course; 3-4 units]

*One of the following in:*

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- POL 101 - Introduction to Political Science (GE) (3)
- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 103 - Social Problems (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)

### V. Seeking Cultural Perspectives

*A survey of human endeavors from a historical, cultural, linguistic, and philosophical perspective, including developing critical appreciation of human expression—both artistic and literary.*

#### A. The History of World Civilizations [2 courses; 6 units]

- HIS 110 - World Civilizations I (GE) (3)
- HIS 111 - World Civilizations II (GE) (3)

#### B. The Fine Arts [2 courses from distinct areas; 4-5 units]

- ART 100 - Introduction to Art (GE) (2)
- ART 102 - Fundamentals of Art (GE) (3)
- ART 200 - History of Art I (GE) (3)
- ART 201 - History of Art II (GE) (3)
- MUH 100 - Introduction to Music (GE) (2)
- MUH 101 - Introduction to Listening (GE) (2)
- TRE 101 - Introduction to Theatre (GE) (2)

#### C. Philosophy [1 course; 3 units]

- PHL 201 - Introduction to Philosophy (GE) (3)
- PHL 211 - Ethics (GE) (3)

Note(s):

B.S.N. candidates choose between two Literature options or one Literature and one Philosophy.

#### D. Literature [2 courses; 5 units]

*Two courses; LIT200 and one upper division Literature course.*

Lower Division:

- LIT 200 - Literature and Culture (GE) **(2)**

Upper Division:

- LIT 350 - World Literature (GE) **(3)**
- LIT 351 - World Cinema (GE) **(3)**
- LIT 352 - Diverse Voices in American Literature (GE) **(3)**
- LIT 353 - Women Writers (GE) **(3)**

#### E. Foreign Language\* [2 courses; 8 units]

*One of the following sequences in the same language, all or part of which may be waived by examination or by petition when English is not the student's native language:*

- CHN 101 - Elementary Chinese (Mandarin) I (GE) **(4)**
- CHN 102 - Elementary Chinese (Mandarin) II (GE) **(4)**
  
- GER 101 - Elementary German I (GE) **(4)**
- GER 102 - Elementary German II (GE) **(4)**
  
- GRK 207 - Biblical Greek I (GE) **(4)**
- GRK 208 - Biblical Greek II (GE) **(4)**
  
- HEB 205 - Biblical Hebrew I (GE) **(4)**
- HEB 206 - Biblical Hebrew II (GE) **(4)**
  
- FRE 101 - Elementary French I (GE) **(4)**
- FRE 102 - Elementary French II (GE) **(4)**
  
- SPA 101 - Elementary Spanish I (GE) **(4)**
- SPA 102 - Elementary Spanish II (GE) **(4)**

\*Note(s):

A foreign language is not required for B.S.N. candidates.

Students who believe they may qualify for a language waiver are advised to make application no later than spring of the sophomore year (or in the semester transfer to PLNU) to avoid possible delay in graduation.

## **First Year Experience**

Point Loma Nazarene University places great value on integrating key components of a liberal arts education as foundational in pursuing and successfully completing a major field of study and a bachelors degree.

The following course has been identified as pivotal and is required to be experienced during the first year of study at Point Loma Nazarene University:

## Requirements

### First Year Experience

#### Required first year courses

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)

*At least three (3) units of College Composition must be completed in the student's first two semesters as a part of the First Year Experience program. Students with qualifying SAT B Writing scores of 670 or higher or ACT English score of 94% or higher will be placed in the three unit WRI120, Honors in College Composition Writing and Research. If these students prefer to take four (4) units of WRI110 rather than three (3) units of WRI120, they may opt out of WRI120 and take WRI110.*

- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) (4)  
OR
- WRI 116 - College Composition: Research - First Year Experience (GE) (2) \*  
*\* WRI116 is for transfer students who have completed an additional approved WRI course or for students who have transferred in approved AP work.*

## College of Arts and Humanities

### Administration

Dean of the Colleges: James G. Daichendt, Ed.D  
Office: Bond Academic Center, Deans' Suite  
Telephone: (619) 849-2412  
Fax: (619) 849-7018  
gdaichen@pointloma.edu  
Administrative Assistant: Kami Leone

### General Information

The College of Arts and Humanities is at the very heart of liberal arts education at Point Loma Nazarene University. Programs in the arts and humanities are offered through five academic departments and the School of Theology and Christian Ministry. Course offerings in the arts and humanities are designed to help students explore a wide range of ideas. The college's highly qualified faculty members are professionally active and committed to engaging students in

the learning experience. By emphasizing the university's mission to engage and challenge minds, to form and model character, and to see service as an expression of faith, the faculty challenge students to become life-long learners, to value the process of personal and intellectual development, and to give their lives in meaningful service to others.

## **Credential and Internship Programs**

California Commission of Teacher Credentialing (CCTC) in single-subject arts and science content areas, Christian Ministries Internship, Institute for Holy Land Studies (a division of Jerusalem University College).

## **Centers**

Point Loma Nazarene University maintains centers within the organization of the College of Arts and Humanities:

- The Margaret Stevenson Center for Women's Studies

## **Accreditations and Affiliations**

Point Loma Nazarene University is accredited by the WASC Senior College and University Commission and the National Association of Schools of Music (NASM). WASC may be contacted at 985 Atlantic Avenue, Suite 100, Alameda, CA 94501, or by telephone at 510-748-9001.

## **Academic Organization**

The College of Arts and Humanities, under the direction of the dean of the college, functions with the supervision of academic departments, schools, and centers. The following is a list of chairs, directors, and deans in the college.

## **Departments**

**Department of Art and Design** - David Carlson, chair

**Department of Communication and Theatre** - Skip Rutledge, chair

**Department of History and Political Science** - Rosco Williamson, chair

**Department of Literature, Journalism, and Modern Languages** - Karl Martin, chair

**Department of Music** - Daniel Jackson and William Clemmons, co-chairs

## **Centers**

**The Margaret Stevenson Center for Women's Studies** - Linda Beail, director

## **Curricula**

Students should refer to the following pages in this Catalog for a complete listing of program characteristics, degree requirements, and descriptions of courses offered by academic areas within the College of Arts and Humanities.

## **College of Arts and Humanities**

### **Department of Art and Design**

## Purposes

Through the making of art and the study of art history, criticism and aesthetics, the department seeks to:

- Develop proficiencies in the studio and design arts.
- Advance visual literacy through the study of art history, art criticism and aesthetics.
- Promote the cultural, intellectual, spiritual, and aesthetic life of students and the university.
- Prepare students for art-related careers or graduate studies.

## Tradition of Excellence

The Department of Art and Design considers the visual arts to be an essential means of communicating societal values, images, and identities. The program builds on the university's liberal arts foundation of general education. Students explore relationships between the art disciplines, and build connections with other academic fields. Studies in traditional, non-traditional, western, and non-western art forms encourage students to develop a broad understanding of the visual arts.

The Department of Art and Design offers three majors - Visual Arts, Art Education, and Graphic Design. In all majors a core of foundation courses lead to advanced studies in the discipline. Independent studies and study abroad programs are available, as well as internships in local museums and art and design-related businesses. The Keller Gallery program includes both professional and student exhibitions. A visiting artist program provides bridges into the professional community of practicing artists. Students also benefit from the university's proximity to the arts community and prominent art museums, galleries and collections in San Diego, Los Angeles, and Baja California, Mexico.

## Career Opportunities

Alumni from the Department of Art and Design have earned advanced degrees from some of the top graduate programs in the country while others have achieved professional careers in art related fields: fine arts, graphic design, web design, publishing, museum and gallery work, arts management, and art education.

## Faculty

David Adey, M.F.A.  
*Cranbrook Academy of Art*

David Carlson, M.F.A., Chair  
*Vermont College of Fine Art*

Lael Corbin, M.F.A.  
*San Diego State University*

Eugene Harris, M.A.  
*San Diego State University*

Courtney Mayer, M.F.A.  
*Washington State University*

James Skalman, M.F.A.  
*University of North Carolina, Chapel Hill*

## Major

### Art Education, B.A.

#### Program Learning Outcomes

**Students who complete the program in Art Education with concentrations in Visual Arts and Graphic Design will be able to:**

1. Produce original, contemporary works of art (visual art or graphic design) using the art elements and design principles, demonstrating current skills and techniques in selected art media and technologies.
2. Write and speak about artists and visual art forms from the history of Western and Non-Western art.
3. Use the elements of art and principles of design to analyze their own artwork.
4. Formulate sequential art curriculum units for use in 7-12 school art programs, using the *California Visual and Performing Arts Art Standards*.
5. Articulate their own philosophy of art education for K-12 grade levels.

#### Required Concentrations

**Choose a Concentration from the following:**

Group A – Visual Arts Concentration

Group B – Graphic Design Concentration

#### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
  
- ART 203 - Graphic Design I: Visual Symbolism (3) **OR**
- ART 206 - Experimental Drawing Studio (3)
  
- ART 210 - Painting: Color and Technique (3)
- ART 202 - Introduction to Computer Graphics (3)
- FCS 150 - Human Development (3)
- One college course in ceramics (3)

Total: 30 Units

#### Upper-Division Requirements

- ART 319 - Visual Arts in the Classroom I (3) *OR*
- ART 455 - Visual Arts in the Classroom II (3) (ART 455 recommended)

- ART 325 - Non-Western Art History (3)
- EDU 302 - Foundations of Education and Learning Theory (3)

Choose one Art History course (3 units):

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)

Total: 12 Units

## Concentrations

### Group A – Visual Arts Concentration

Choose one two-course sequence (6 units):

- ART 221 - Photography: Darkroom and Film (3)
- ART 321 - Photography: Alternative Processes (3)  
*OR*
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 322 - Sculpture: Objects and Installation (3)  
**OR**
- ART 223 - Printmaking I (3)
- ART 323 - Printmaking II (3)  
*OR*
- ART 310 - Painting II (3)  
**AND**
- ART 330 - Illustration I (3) **OR**
- ART 345 - Life Drawing (3)

Total: 6 Units

Capstone courses (9 units):

- ART 390 - Advanced Studio Practice (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 472 - Exhibition or Research Preparation (3)

Total: 9 Units

Total: 15 Units

### Group B – Graphic Design Concentration

Two-course sequence (6 units):

- ART 303 - Graphic Design II: Typography (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3)

Capstone courses (7-9 units):

- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 471 - Graphic Design Portfolio Review (3)
- ART 470 - Internship (1-3)

Total: 13-15 Units

Note(s):

\*Meets the general education requirement in the Fine Arts.

## Graphic Design, B.A.

### Program Learning Outcomes

*Students who complete the program in Graphic Design with concentrations in Marketing, Interdisciplinary, Interactive Web, and Illustration will be able to:*

1. Use current graphic design tools and technologies to create, produce, and distribute visual messages.
2. Identify historically important design styles, movements, artists, and designers.
3. Write and speak intelligently about their design strategies, problem solving, aesthetic choices, and contemporary design trends.
4. Produce an entry-level professional quality portfolio of graphic design work to help secure employment in a design-related career or pursue graduate studies.
5. Articulate their own philosophy regarding mass media and its relationship to graphic design.

### Concentrations

- Marketing Concentration
- Interdisciplinary Concentration
- Interactive Web Concentration
- Illustration Concentration

### Marketing Concentration

#### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \* **OR**
- ART 201 - History of Art II (GE) (3) \*
- ART 202 - Introduction to Computer Graphics (3)

- ART 203 - Graphic Design I: Visual Symbolism (3)

Total: 18 Units

### Upper-Division Requirements

- ART 303 - Graphic Design II: Typography (3)
- ART 304 - Modern Art History (3) **OR**
- ART 305 - Contemporary Art History (3)
- ART 315 - Introduction to Interactive Web Design (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 450 - Interactive Web Design (3)
- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 470 - Internship (1-3)
- ART 471 - Graphic Design Portfolio Review (3)
- MKT 332 - Principles of Marketing (3)
- **Choose three (3) courses from the following:**
- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 336 - Integrated Marketing Communications (3)
- MKT 350 - Social Media and Digital Marketing (3)
- MGT 382 - Applied Entrepreneurship (3)

Total: 37 Units

### Interdisciplinary Concentration

#### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \* **OR**
- ART 201 - History of Art II (GE) (3) \*
- ART 202 - Introduction to Computer Graphics (3)
- ART 203 - Graphic Design I: Visual Symbolism (3)
- ART 226 - Photography: Digital (3)
- **Choose one from the following:**
- ART 206 - Experimental Drawing Studio (3)
- ART 210 - Painting: Color and Technique (3)
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 223 - Printmaking I (3)

Total: 24 Units

### Upper-Division Requirements

- ART 303 - Graphic Design II: Typography (3)
- ART 304 - Modern Art History (3) **OR**
- ART 305 - Contemporary Art History (3)
  
- ART 315 - Introduction to Interactive Web Design (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 450 - Interactive Web Design (3)
- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 470 - Internship (1-3)
- ART 471 - Graphic Design Portfolio Review (3)
  
- **Choose one course from the following:**
- ART 310 - Painting II (3)
- ART 321 - Photography: Alternative Processes (3)
- ART 322 - Sculpture: Objects and Installation (3)
- ART 323 - Printmaking II (3)
- ART 326 - Photography: Contemporary Images (3)
- ART 331 - Illustration II (3)

Total: 28 Units

### Interactive Web Concentration

#### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
  
- ART 200 - History of Art I (GE) (3) \* **OR**
- ART 201 - History of Art II (GE) (3) \*
  
- ART 202 - Introduction to Computer Graphics (3)
- ART 203 - Graphic Design I: Visual Symbolism (3)
  
- **Choose one course from the following:**
- ART 206 - Experimental Drawing Studio (3)
- ART 210 - Painting: Color and Technique (3)
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 223 - Printmaking I (3)
- ART 226 - Photography: Digital (3)

Total: 21 Units

## Upper-Division Requirements

- ART 303 - Graphic Design II: Typography (3)
- ART 304 - Modern Art History (3) **OR**
- ART 305 - Contemporary Art History (3)
  
- ART 315 - Introduction to Interactive Web Design (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 450 - Interactive Web Design (3)
- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 470 - Internship (1-3)
- ART 471 - Graphic Design Portfolio Review (3)
  
- **Choose one course from the following:**
- ART 321 - Photography: Alternative Processes (3)
- ART 331 - Illustration II (3)
- MGT 382 - Applied Entrepreneurship (3)

Total: 28 Units

## Illustration Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
  
- ART 200 - History of Art I (GE) (3) \* **OR**
- ART 201 - History of Art II (GE) (3) \*
  
- ART 202 - Introduction to Computer Graphics (3)
- ART 203 - Graphic Design I: Visual Symbolism (3)
- ART 210 - Painting: Color and Technique (3)
  
- **Choose one course from the following:**
- ART 206 - Experimental Drawing Studio (3)
- ART 223 - Printmaking I (3)
- ART 226 - Photography: Digital (3)

Total: 24 Units

### Upper Division Requirements

- ART 303 - Graphic Design II: Typography (3)
- ART 304 - Modern Art History (3) **OR**

- ART 305 - Contemporary Art History (3)
- ART 315 - Introduction to Interactive Web Design (3)
- ART 330 - Illustration I (3)
- ART 331 - Illustration II (3)
- ART 333 - Graphic Design III: Branding and Identity Programs (3) **OR**
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 345 - Life Drawing (3)
- ART 450 - Interactive Web Design (3)
- ART 468 - Graphic Design Portfolio Preparation (3)
- ART 470 - Internship (1-3)
- ART 471 - Graphic Design Portfolio Review (3)

Total: 31 Units

Note(s):

*\* Meets general education requirement in the fine arts*

## **Visual Arts, B.A.**

### Program Learning Outcomes

**Students who complete the program of Visual Arts with concentrations in Painting, Drawing, and Printmaking, Sculpture and Installation, and Photography will be able to:**

1. Apply the art elements and design principles to two-and/or three-dimensional visual art forms to critically analyze works of art.
2. Create original works of art that demonstrate a contemporary approach to theory, media, and technology.
3. Write and speak knowledgeably and critically about issues relevant to historically important artists, art styles, and art movements.
4. Write and speak with coherency and self-awareness about their own artwork or research, and its relationship to contemporary culture and art history.
5. Pursue graduate or artist/scholars-in-residency programs, gallery and museum exhibitions, and public art commissions.

*Students who complete the program in Visual Art with a concentration in Art History will be able to:*

1. Recognize a wide range of artists, visual art forms, and cultures from the history of Western and Non-Western art.
2. Create original, contemporary artworks in studio and/or design that illustrate current skills and techniques in selected art media and technologies.
3. Use the elements of art and principles of design to critically analyze and interpret historical and contemporary art forms.

**Students who complete the program in Visual Art with a concentration in Video, Performance, and Interactive Media will be able to:**

1. Perform technological skills and techniques to produce time-based artworks in video, performance, or interactive media.
2. Use the elements of art and principles of design to describe, analyze, and evaluate works of time-based art.

3. Apply historical and contemporary art forms and theories to time-based media.

## Concentrations

- Drawing/Painting/Printmaking Concentration
- Sculpture and Installation Concentration
- Photography Concentration
- Art History Concentration
- Video, Performance, and Interactive Media Concentration

## Art History Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- HIS 270 - Research Methods (4)

### Electives (Lower-Division)

Choose one:

- ART 206 - Experimental Drawing Studio (3)
- ART 210 - Painting: Color and Technique (3)
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 223 - Printmaking I (3)

Total: 22 Units

### Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 325 - Non-Western Art History (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)

### Electives (Upper-Division)

- **Choose one four unit upper-division history course (4)**

Choose two:

- COM 300 - Narrative and Documentary Film (3)
- HIS 375 - African Cultures and Histories (3)
- PHL 341 - Philosophy and Art (3)
- Upper-division transfer courses in Art History (3-6)

Total: 32 Units

## Drawing/Painting/Printmaking Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- ART 206 - Experimental Drawing Studio (3)
- ART 210 - Painting: Color and Technique (3)
- ART 202 - Introduction to Computer Graphics (3)
- ART 223 - Printmaking I (3)

Total: 27 Units

### Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 310 - Painting II (3) **OR**
- ART 323 - Printmaking II (3)
- ART 345 - Life Drawing (3)
- ART 390 - Advanced Studio Practice (3)
- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)
- **Complete one additional upper-division Art course (2-3)**

Total: 27-28 Units

## Photography Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)

- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- ART 206 - Experimental Drawing Studio (3)
- ART 202 - Introduction to Computer Graphics (3)
- ART 221 - Photography: Darkroom and Film (3)

#### Electives (Lower Division)

Choose one:

- ART 203 - Graphic Design I: Visual Symbolism (3)
- ART 210 - Painting: Color and Technique (3)
- ART 222 - Sculpture: Materials and Fabrication (3)
- ART 223 - Printmaking I (3)
- ART 226 - Photography: Digital (3)

Total: 27 Units

#### Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 321 - Photography: Alternative Processes (3)
- ART 326 - Photography: Contemporary Images (3)
- ART 390 - Advanced Studio Practice (3)
- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)
- **Complete one additional upper-division Art course (2-3)**

Total: 27-28 Units

#### Sculpture and Installation Concentration

##### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3)
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*
- ART 206 - Experimental Drawing Studio (3)
- ART 202 - Introduction to Computer Graphics (3)
- ART 222 - Sculpture: Materials and Fabrication (3)

## Electives (Lower-Division)

Choose one:

- ART 203 - Graphic Design I: Visual Symbolism (3)
- ART 210 - Painting: Color and Technique (3)
- ART 226 - Photography: Digital (3)
- ART 221 - Photography: Darkroom and Film (3)
- ART 223 - Printmaking I (3)
- TRE 270 - Acting I (3)

Total: 27 Units

## Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 322 - Sculpture: Objects and Installation (3)
- ART 390 - Advanced Studio Practice (3)
- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)

## Electives (Upper-Division)

- **Choose five to six units from any upper-division Art, Design, or Art History courses offered by the Department of Art and Design or choose from the following:**
- COM 300 - Narrative and Documentary Film (3)
- TRE 304 - Theatre History (3)
- TRE 354 - Movement I (3) **OR**
- TRE 370 - Acting II (3)

Total: 27-28 Units

## Video, Performance, and Interactive Media Concentration

### Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3) **OR**
- ART 104 - Three-Dimensional: Composition and Space Design (3)
- ART 115 - Drawing I (3)
- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*

- ART 202 - Introduction to Computer Graphics (3)
- ART 226 - Photography: Digital (3)
- COM 243 - Introduction to TV and Film Production (3)
- COM 275 - Audio Production (2)

Note(s):

*\*Fulfills general education requirement*

Total: 23 Units

### Upper-Division Requirements

- ART 305 - Contemporary Art History (3)
- ART 315 - Introduction to Interactive Web Design (3)
- ART 390 - Advanced Studio Practice (3)
- ART 450 - Interactive Web Design (3)
- COM 300 - Narrative and Documentary Film (3)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)

### Capstone Courses

- ART 420 - Contemporary Studio Seminar (3)
- ART 466 - Senior Studio Exhibition or Research Preparation (3)
- ART 470 - Internship (1-3)
- ART 472 - Exhibition or Research Preparation (3)

Total: 31 Units

### Recommended Electives\*

- TRE 270 - Acting I (3)
- TRE 354 - Movement I (3)
- TRE 437 - Lighting and Makeup Techniques (2)

Note(s):

*\*Also recommended in Sculpture and Installation Concentration*

Note(s):

*\*Meets the general education requirement in the Fine Arts*

## Minor

### Art History Minor

## Program Learning Outcomes

*Students who complete the program in Art History will be able to:*

1. Recognize a wide range of artists, visual art forms, and cultures from the history of Western and Non-Western art.
2. Create original, contemporary artworks in studio and/or design that illustrate current skills and techniques in selected art media and technologies.
3. Use the elements of art and principles of design to critically analyze and interpret historical and contemporary art forms.

## Lower-Division Requirements

- ART 200 - History of Art I (GE) (3) \*
- ART 201 - History of Art II (GE) (3) \*

Total: 6 Units

## Upper-Division Requirements

- ART 304 - Modern Art History (3)
- ART 305 - Contemporary Art History (3)
- ART 325 - Non-Western Art History (3)
- ART 335 - Design History: Industrial Revolution to Contemporary Design (3)

Total: 12 Units

Minor Total: 18 Units

Note(s):

**\*Meets the general education requirement in the Fine Arts.**

## Art Minor

### Required

## Lower-Division Requirements

- ART 103 - Two-Dimensional Design (3) *OR*
- ART 104 - Three-Dimensional: Composition and Space Design (3)
  
- ART 115 - Drawing I (3)

Total: 6 Units

## Upper-Division Requirements

- ART 304 - Modern Art History (3) *OR*
- ART 305 - Contemporary Art History (3)

Electives: 9 Units

**Choose nine upper-division units from Studio and Graphic Design courses listed in the Catalog.**

Total: 12 Units

Minor Total: 18 Units

Note(s):

*It is highly recommended that Art minors take either ART 200 or ART 201 to fulfill the general education requirement in the Fine Arts.*

## Department of Communication and Theatre

### Mission Statement

As communicators, all humans are part of an ongoing conversation. Communication is inevitable, irreversible, and continuous. The messages we send and receive shape our attitudes, build our relationships, and impact the environment in which we live. The mission of the Department of Communication and Theatre is to empower students with a meaningful Christian voice in the ongoing conversation of the world in which we live. We strive to meet this mission through learning, growing, and serving.

### Learning Informed by our Faith in Christ

- Students will learn basic theory about the discipline of communication, organizational communication, media communication, broadcast journalism and theatre.

### Growing in a Christ Centered Community

- As students understand the process of communication, they will be challenged to use communication competently in a variety of complex environmental and social contexts.

### Serving in a Context of Christian Faith

- Students will participate in the disciplines of Communication and Theatre in the collective community around them.

The Department of Communication and Theatre is committed to helping each student learn, grow, and serve so that they may contribute meaningfully to the ongoing conversation of all humans and seek to make a positive impact in the world through their communication abilities. The power to communicate is the power to transform our world one conversation at a time.

## Purposes

- To instruct students in the philosophy, content, methodology, skills, and responsibilities of communication;
- To provide specialized training for those entering communication-centered professions including: management, sales, public relations, training; broadcasting and electronic media; and theatre and the performing arts;
- To provide background courses for those desiring to enter communication related fields including ministry, law, education, government, social services, journalism, and graduate studies;
- To help students develop skills through involvement in a nationally competitive forensics program, internships in major corporations, law firms, radio and television stations, and professional theatre companies.

## Tradition of Excellence

The Department of Communication and Theatre is a comprehensive and dynamic department that prepares students for leadership in a variety of communication-intensive careers. Classroom instruction is enhanced by the smaller class sizes and individual attention from faculty who are committed to the academic and personal success of each student. There are five programs of study to choose from: Communication (general), Managerial and Organizational Communication, Theatre, Media Communication and an interdepartmental major in Broadcast Journalism. As a part of the curriculum, a 120-hour internship must be completed; often, internships can result in full-time jobs upon graduation.

## Career Opportunities

Experiences in the classroom are greatly enhanced by the department's co-curricular and professional opportunities. Point Loma Nazarene University has one of the most respected and award-winning speech and debate teams in the nation. The Theatre program has been the home for more than 135 stage productions in the last 34 years including *Hamlet*, *Romeo and Juliet*, *My Fair Lady*, *The Sound of Music*, *Waiting for Godot*, *You Can't Take It With You*, and *The Caucasian Chalk Circle*.

The department also supervises an on campus cable television channel - CCTV-3 and an Internet-based radio station, KPLR. Both stations are student-managed, creating original productions for on-campus audiences. The stations are based in well-equipped facilities which include a multi-camera HD studio, digital audio and video editing, HD field production cameras and radio broadcast booths. Recent showcase productions include independent films, a game show and an all-day Christmas music request show raising money for local charities. Students also have opportunities to work in PLNU publications such as the student newspaper, yearbook, and literary magazine.

Communication students seeking further academic opportunities have presented original research at professional conferences and gained successful admission into graduate schools.

A degree in Communication and Theatre can prepare a student for a career in media communication and business, public relations, theatre and performing arts and other related careers in politics and government, law, social and human services, journalism, and ministry.

## Faculty

Bob Brower, Ph.D.  
*University of Kansas*

Jeffrey L. Birdsell, Ph.D.  
*The University of Texas at Austin*

Alan C. Hueth, Ph.D.  
*University of Dayton*

Melissa Newman, Ph.D.  
*Regent University*

Lisa Raser, Ph.D.  
*Southern Illinois University*

Skip Rutledge, Ph.D., Chair  
*Regent University*

Walter O. Williams, Ph.D.  
*Regent University*

Ronda R. Winderl, Ph.D.  
*New York University*

## **Major**

### **Communication, B.A.**

#### Program Learning Outcomes

**Students who complete the program in Communication will be able to:**

1. Learn basic theory and application or performance skills about and within the discipline of communication.
2. Use communication competently in a variety of complex environmental and social contexts.
3. Participate in the disciplines of communication in the collective community around them.

#### Required Concentrations

*Choose one of the following concentrations:*

Concentration A: Societal Communication

Concentration B: Public Address

#### Lower-Division Core Requirements

- COM 190 - Interpersonal Communication (3)
- COM 195 - Media Literacy (3)
- COM 220 - Small Group Communication (3)
- COM 231 - Argumentation and Debate (GE) (3)
- JRN 250 - Introduction to Journalism (3)

Total: 15 Units

#### Upper-Division Core Requirements

- COM 422 - Portfolio Construction (1)

- COM 460 - Rhetorical Theories and Models (3)
- COM 465 - Communication Theories and Research (3)
- COM 485 - Communication, Values, and Society (2)

Total: 9 Units

## Upper-Division Electives – 12 Units

Choose 12 units from:

- COM 310 - Nonverbal Communication (3)
- COM 312 - Gender and Communication (WS) (3)
- COM 330 - Persuasion (3)
- COM 365 - Intercultural Communication (3)
- COM 390 - Introduction to Public Relations (3)
- COM 490 - Special Studies in Communication (1-3) (3) **Units required**

Total: 12 Units

## Required Concentrations

### Concentration A: Societal Communication

#### Requirements:

COM 421 - Internship in Communication (3)

*Choose one (1) course from:*

SOC 101 - Introduction to Sociology (GE) (3)\*\*

SOC 201 - Cultural Anthropology (GE) (3)

**Choose two (2) courses from:**

COM 260 - Advanced Public and Professional Speaking (3)

PSY 320 - Social Psychology (3)

PSY 345 - Group Dynamics (3)

WRI 365 - Writing for Professional Careers (3)

Note(s):

*\*\*Meets a general education requirement.*

Total Combined Core & Societal Communication Concentration Requirements: 48 Units

### Concentration B: Public Address

## Requirements:

COM 260 - Advanced Public and Professional Speaking (3)

COM 315 - Oral Interpretation (3)

*Choose one (1) course from:*

TRE 250 - Voice and Diction (2)

TRE 270 - Acting I (3)

*Complete 3 units from the following:*

COM 210 - Communication Practicum I (1-2)

COM 420 - Communication Practicum II (1-2)

Total Combined Core & Public Address Concentration Requirements: 47 - 48 Units

## Managerial and Organizational Communication, B.A.

### Program Learning Outcomes

**Students who complete the program in Managerial and Organizational Communication will be able to:**

1. Develop a sophisticated understanding of communication as the negotiation of meaning.
2. Display communication competence both verbally and nonverbally in interpersonal, small group, organizational, and intercultural contexts.
3. Formulate a thesis, organize a complex idea, and support it with appropriate evidence using proper grammar and punctuation.
4. Demonstrate an ability to present themselves in a professional manner including resume, interview skills, and presentations.
5. Demonstrate an understanding and ability to work collaboratively in a group.
6. Analyze and conduct original communication research (quantitative and qualitative) using scholarly journals, data bases, and collecting and analyzing empirical data.
7. Demonstrate an understanding of basic theoretical concepts relative to organizational behavior including scientific management, systems theory, and organizational culture.
8. Integrate a Christian perspective of values and ethics in their communication in interpersonal, small group organizational and intercultural contexts.
9. Develop an awareness of multiple approaches to leadership and develop a personal leadership philosophy.

### Lower-Division Core Requirements

- COM 190 - Interpersonal Communication (3)
- COM 220 - Small Group Communication (3)
- COM 265 - Introduction to Empirical Research in Communication (3)
- ACC 200 - Principles of Accounting for Non-Business Majors (3)
  
- ECO 100 - Survey of Economics (GE) (3) \*\*  
OR
- ECO 101 - Principles of Macroeconomics (GE) (3) \*\*  
OR
- ECO 102 - Principles of Microeconomics (GE) (3) \*\*

Lower-division units: 15 units

Note(s):

*\*\*Meets a general education requirement.*

*All majors take COM 100 (3) or COM 231 (3) as an additional general education requirement.*

## Upper-Division Core Requirements

- COM 330 - Persuasion (3)
- COM 340 - Organizational Communication (3)
- COM 345 - Management Communication (3)
- COM 421 - Internship in Communication (3)
- COM 422 - Portfolio Construction (1)
- COM 465 - Communication Theories and Research (3)
- COM 485 - Communication, Values, and Society (2)

Total: 18 Units

Take one (1) course from the following:

- COM 260 - Advanced Public and Professional Speaking (3)
- WRI 365 - Writing for Professional Careers (3)

Take one (1) course from the following:

- COM 390 - Introduction to Public Relations (3)
- COM 450 - Communication Training and Development (2)

Take two (2) courses from the following sixteen (16) options (selections must include at least 2 different courses AND 6 units total):

- COM 365 - Intercultural Communication (3)
- COM 490 - Special Studies in Communication (1-3) **3 Units required**
- COM 492 - Independent Study (1-3)
- BUS 340 - Real Estate Principles and Practices (3)
- BUS 475 - Sustainability in Action (3)
- BUS 480 - International Business (3)
- FIN 335 - Business Finance (3)
- FIN 415 - Investments (3)
- MKT 332 - Principles of Marketing (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)
- MGT 374 - Human Resource Management (3)
- MGT 382 - Applied Entrepreneurship (3)
- MGT 470 - Nonprofit Organization Management (3)
- HON 498 - Honors Project I (2) **AND**

- HON 499 - Honors Project II **(1)** (counts as one course)

Upper-Division Units: 29-30

Total Units Required for Major: 45-46 \*

*\*Depending on specific courses selected and not including units counted toward general education requirements.*

*+The BA in Managerial and Organizational Communication is an approved program under PLNU's WASC Regional Accreditation. Since it is not a business major, it is not an Accreditation Council for Business Schools and Programs (ACBSP) approved program.*

## **Media Communication, B.A.**

### Concentrations

- Multimedia
- Performance
- Production
- Film Studies

### Program Learning Outcomes

**Students who complete the program in Media Communication will be able to:**

1. Demonstrate skills in the theoretical and/or historical critique of media. This includes the integration of a Christian worldview and ethical framework for viewing, interpreting, and critiquing media messages.
2. Demonstrate scriptwriting skills for radio, TV, film, internet, church media, and/or corporate media industries.
3. Demonstrate production and/or performance skills in radio, TV, film, internet, church media, and/or corporate media industries.
4. Demonstrate professional socialization skills in a radio, TV, film, internet, church media, and/or corporate media internship.

### Lower-Division Core Requirements

- COM 150 - Introduction to Media Communication **(3)**
- COM 175 - Scriptwriting for Television and Film **(3)**
- COM 195 - Media Literacy **(3)**
- COM 243 - Introduction to TV and Film Production **(3)**
- COM 275 - Audio Production **(2)**
- JRN 215 - Newspaper Workshop **(1) OR**
- WRI 216 - Literary Magazine Workshop **(1) OR**
- JRN 217 - Yearbook Workshop **(1)**

Total: 15 Units

### Upper-Division Core Requirements

- COM 421 - Internship in Communication (3)  
*(Not required for the Film Studies concentration)*
- COM 422 - Portfolio Construction (1)
- COM 465 - Communication Theories and Research (3)
- COM 485 - Communication, Values, and Society (2)

Total: 9 Units

## Upper-Division Electives

Choose nine (9) units from:

- COM 300 - Narrative and Documentary Film (3)
- COM 340 - Organizational Communication (3)
- COM 350 - Electronic Media in Communication (3)
- COM 390 - Introduction to Public Relations (3)
- COM 490 - Special Studies in Communication (1-3)
- JRN 340 - Media Law and Ethics (3) \*

Students with a Film Studies concentration may also select the following two courses:

- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)

Total: 9 Units

## Writing Electives

Choose one (1) course from:

- WRI 220 - Introduction to Creative Writing (3)
- JRN 250 - Introduction to Journalism (3)
- WRI 322 - Creative Writing: Fiction (3)
- WRI 323 - Creative Writing: Creative Nonfiction (3)

Total: 3 Units

## Concentrations

**Choose one track and select electives among the choices.** To complete the major, there must be a minimum of 24 upper division units between the core and concentration.

## Multimedia

Take a total of 8 units from:

- COM 420 - Communication Practicum II (1-2)
- ART 103 - Two-Dimensional Design (3)
- ART 202 - Introduction to Computer Graphics (3)
- ART 315 - Introduction to Interactive Web Design (3)
- ART 450 - Interactive Web Design (3)

Total: 8 Units

## Performance

Take a total of 8 units from:

- COM 231 - Argumentation and Debate (GE) (3)
- COM 260 - Advanced Public and Professional Speaking (3)
- COM 313 - Television News Production (3)
- COM 420 - Communication Practicum II (1-2) **1 Unit required**
- COM 425 - Advanced Television Workshop (1)
- COM 435 - Advanced Audio Production (1)
- TRE 250 - Voice and Diction (2)
- TRE 270 - Acting I (3)

Total: 8 Units

## Production

Take a total of 8 units from:

- COM 313 - Television News Production (3)
- COM 420 - Communication Practicum II (1-2)
- COM 425 - Advanced Television Workshop (1)
- COM 435 - Advanced Audio Production (1)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)
- TRE 436 - Stagecraft Techniques (2)
- TRE 437 - Lighting and Makeup Techniques (2)

Total: 8 Units

## Film Studies

*NOTE: Student must be accepted into the LAFSC program in order to complete this concentration.*

- COM 470 - Hollywood Production Workshop (4)
- COM 471 - Faith and Artistic Development in Film (3)
- COM 472 - Internship: Inside Hollywood (3/6) **6 Units required**

Choose one of the following:

- COM 371 - Professional Acting for the Camera (3)
- COM 473 - Narrative Storytelling (3)
- COM 474 - Professional Screenwriting (3)
- COM 480 - Independent Study (3)

Total: 16 Units (taken at LAFSC)

## Minor

### Cinema Studies Minor - Communication and Theatre

This is an interdisciplinary minor in cinema which draws from historical, religious, philosophical, theoretical, and aesthetic perspectives. Students are encouraged to select courses which are based on students' intellectual and professional interests. Students interested in film criticism and/or writing and teaching may take electives in film theory and criticism, while students interested in scriptwriting and production may take courses in those areas. The minor is structured as interdisciplinary in its electives so that students will truly be studying in the liberal arts tradition. All students must take the required courses, and then must select from the elective courses to complete the minor.

### Program Learning Outcomes

1. Identify and articulate the relationships among film styles, genres, and techniques.
2. Demonstrate knowledge of the relationship between films and the historical moments from which they emerge.
3. Analyze and interpret the film images and narratives using film theory and terminology.
4. Evaluate films, including from a faith based perspective, by using higher and lower order thinking and writing skills.
5. Construct film scripts and create films by using film production techniques.

### Core Courses

- LIT 200 - Literature and Culture (GE) (2) \*
- COM 243 - Introduction to TV and Film Production (3)
- COM 300 - Narrative and Documentary Film (3)

Total: 8 Units

### Notes:

\* LIT 200 Literature and Culture course subtitle must be "Film Adaptation".

COM 175 is recommended, but cannot be substituted for required of elective course for this minor.

Elective Courses: Nine (9) elective units taken from three (3) separate disciplines

### Communication

- COM 420 - Communication Practicum II (1-2)
- COM 442 - Field Television Production (3)

- COM 443 - Studio Television Production (3)
- COM 490 - Special Studies in Communication (1-3)

## History

- HIS 368 - Modern China Through Film (4)
- HIS 490 - Special Studies in History (1-4)

## Literature, Journalism, and Modern Languages

- LIT 351 - World Cinema (GE) (3)
- LIT 490 - Special Studies in Literature (1-3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 490 - Special Studies in Spanish (1-3)

## Theology and Christian Ministry

- PHL 380 - Alienation, Transformation, and Reconciliation in Film (3)

Total for Minor: 17-20 Units

## **Communication Minor**

### Lower-Division Requirements

Choose two (2) courses from the following:

- COM 190 - Interpersonal Communication (3)
- COM 220 - Small Group Communication (3)
- COM 231 - Argumentation and Debate (GE) (3)
- COM 260 - Advanced Public and Professional Speaking (3)

Total: 6 Units

### Upper-Division Requirements

Choose any four (4) courses from the following:

- COM 310 - Nonverbal Communication (3)
- COM 312 - Gender and Communication (WS) (3)
- COM 315 - Oral Interpretation (3)
- COM 340 - Organizational Communication (3)
- COM 345 - Management Communication (3)

Total: 12 Units

Minor Total: 18 Units

## **Media Communication Minor**

### Core Requirements

- COM 150 - Introduction to Media Communication (3)
- COM 175 - Scriptwriting for Television and Film (3)
- COM 243 - Introduction to TV and Film Production (3)
- COM 275 - Audio Production (2)

Total: 11 Units

### Upper-Division Requirements

Choose twelve (12) units from the following courses:

- COM 300 - Narrative and Documentary Film (3)
- COM 350 - Electronic Media in Communication (3)
- COM 420 - Communication Practicum II (1-2)
- COM 425 - Advanced Television Workshop (1)
- COM 435 - Advanced Audio Production (1)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)
- COM 490 - Special Studies in Communication (1-3) (3) **Units required**

Total: 12 Units

Minor Total: 23 Units

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, and Modern Languages, and the Department of Communication and Theatre.

### Requirements

- MKT 332 - Principles of Marketing (3)
- COM 330 - Persuasion (3)
- COM 390 - Introduction to Public Relations (3)
- COM 405 - Public Relations Cases and Campaigns (3)
- JRN 250 - Introduction to Journalism (3)
- JRN 355 - Public Relations Writing (3)

Minor Total: 18 Units

## **Theatre Minor**

### Core Requirements

- TRE 204 - Orientation to Theatre (3)
- TRE 270 - Acting I (3)

Lower-Division Total: 6 Units

### Upper-Division Electives:

Choose 12 units from the following courses:

- TRE 304 - Theatre History (3)
- TRE 350 - Musical Theatre (3)
- TRE 354 - Movement I (3)
- TRE 370 - Acting II (3)
- TRE 436 - Stagecraft Techniques (2)
- TRE 437 - Lighting and Makeup Techniques (2)
- TRE 451 - Movement II (3)

Choose 2 units from the following:

- TRE 210 - Theatre Practicum I (1-2)  
and/or
- TRE 420 - Theatre Practicum II (1-2)

Upper-Division Total: 12 Units

Minor Total: 20 Units

## **Department of History and Political Science**

### **Purposes**

- To emphasize rigorous analysis of political structures, historical changes and continuities, and human relationships;
- To train students in the craft of communicating their ideas orally and in writing with precision and formal organization;
- To help students attain career-enhancing experiences outside the classroom;
- To equip students for immediate entry into either graduate/law school or a chosen career.

### **Tradition of Excellence**

The Department of History and Political Science has a strong tradition of encouraging scholarship for service. The faculty not only have doctorates from renowned universities and personal scholarly pursuits, they also have abiding commitments to helping students learn about the people, events, and political structures that have created, and are creating, the world in which we live. The classroom goal of understanding is coupled with Wesleyan emphasis on human responsibility and creativity: To whom much is given, much is expected. Each of the four majors offers distinct avenues of study and career options; however, the students and faculty are joined in the belief that intelligent and wise Christians can be a force for good in the world. Small classes, student clubs, student-faculty dinners, shared travel opportunities, internship experiences, visiting lectures, and tight-knit departmental friendships provide the possibility of a fulfilling scholarly life in Colt Hall. Housed also in Colt Hall and overseen by department faculty are the Margaret Stevenson Center for Women's Studies and the Pre-Law Program.

## **Career Opportunities**

Most graduates pursue careers in social service, government, teaching, ministry, and law. The department helps students find internships that fit career targets. Over the last decade a strong track record has been established for placing students, often with excellent scholarships and fellowships, in high-quality graduate schools, including UC Berkeley, Harvard, Yale, UCSD, and UCLA. Our hope is that these who are beginning their post-graduate careers will follow in the footsteps of established alumni who include college professors, librarians, directors of relief agencies, judges, public policy experts, school administrators, diplomats, leaders within religious denominations, and a university president. Students are encouraged and empowered in the department to be creative with their lives in the service of church, community, nation, and world.

## **Faculty**

Linda M. Beail, Ph.D.  
*University of Iowa*

Rick A. Kennedy, Ph.D.  
*University of California, Santa Barbara*

Jaeyoon Kim, Ph.D.  
*University of Oregon*

Lindsey J. H. Lupo, Ph.D.  
*University of California, Irvine*

Kelli McCoy, Ph.D.  
*University of California, San Diego*

Rosco B. Williamson, Ph.D., Chair  
*University of California, San Diego*

William A. Wood, Ph.D.  
*Indiana University*

## **Major**

### **History, B.A.**

#### **Program Learning Outcomes**

**Students who complete the program in History will be able to:**

1. Complete a substantial historical project autonomously.
2. Demonstrate the relationship between primary and secondary materials by assessing a historian's work and recognizing the evidence used to construct that historical argument.
3. Present and analyze, in written or oral presentation, different perspectives on an event from the past.
4. Have an academic transcript that shows courses with content that ranges over time, space, culture, and qualitative and quantitative historical methods.
5. Find appropriate materials online, in a library, or in the community and know how to cite them.

## Lower-Division Requirements

- HIS 270 - Research Methods (4)

## Upper-Division Requirements

- HIS 470 - Senior Seminar in History (4)

## Non-Western electives

Select 8 units from the following

- HIS 340 - Russia to 1900 (4)
- HIS 342 - Twentieth-Century Russia and the Soviet Union (4)
- HIS 350 - Islamic Civilization (4)
- HIS 355 - Modern Middle East (4)
- HIS 356 - Early East Asia (4)
- HIS 360 - Modern South Asia (4)
- HIS 365 - Modern Japan and Korea (4)
- HIS 368 - Modern China Through Film (4)
- HIS 369 - China in Revolution (4)

## European electives

Select 8 units from the following

- HIS 308 - Early Modern Europe (4)
- HIS 311 - European Intellectual History (4)
- HIS 413 - Nineteenth-Century Europe (4)
- HIS 414 - Twentieth-Century Europe (4)
- HIS 415 - Europe and the World (4)

## American electives

Select 8 units from the following

- HIS 316 - Colonial and Revolutionary America (4)
- HIS 320 - United States History, 1815-1914 (4)
- HIS 370 - California History (4)

- HIS 380 - America in the 1960's (4)
- HIS 425 - United States Since 1914 (4)
- HIS 435 - Asian-American History: 1800 to the Present (4)
- HIS 436 - America in East Asia: 1800 to the Present (4)
- HIS 480 - San Diego Urban History (4)

## 12 Additional upper-division History units

*Choose from any of the courses listed above, below, or from an approved study abroad program.*

- HIS 372 - Two Years Before the Mast and the History of Coastal California (2)
- HIS 375 - African Cultures and Histories (3)
- HIS 460 - Internship in History (1-4)
- HIS 475 - Topics in Women's History (WS) (4)
- HIS 484 - Ancient and Medieval Christianity (3)
- HIS 486 - Modern Christianity (3)
- HIS 487 - The Ancient Historians (4)
- HIS 490 - Special Studies in History (1-4)

Total: 40 Units

## International Studies, B.A.

### Program Learning Outcomes

*Students who graduate with a degree in International Studies will be able to:*

1. Recognize and appreciate the historical, political, social, cultural, and economic dimensions of international processes and issues.
2. Critically analyze issues of global significance using knowledge and techniques from more than one academic discipline (e.g. political science, history, geography, economics, sociology, literature, etc.)
3. Make informed, reasoned, and ethical judgments in matters relating to issues of international public action.
4. Demonstrate a sense of global awareness, by critically evaluating his or her own culture and society in a global and comparative context.

### Concentrations

- |                                      |                 |
|--------------------------------------|-----------------|
| • Peace Studies                      | • Asia          |
| • Europe                             | • Latin America |
| • Middle East                        | • Africa        |
| • Russia and the Former Soviet Union |                 |

### Lower-Division Requirements

- POL 230 - Introduction to International Relations (4)
- POL 270 - Scope and Methods of Political Science (4)
- POL 290 - World Regional Geography (3)

- ECO 101 - Principles of Macroeconomics (GE) (3) \*

Total: 14 Units

## Upper-Division Core Requirements

- POL 370 - Comparative Politics (4)
- POL 415 - Women and Politics (WS) (4)
- POL 435 - Global Governance (4)
- POL 450 - Issues of Global Human Rights (2)
- POL 460 - Internship in Political Science (2-4) (3) **Units required**
- HIS 415 - Europe and the World (4)

Note(s):

*\*Requirement in general education*

## Off-Campus Cooperative Program (OCP) or World Capitals

Students must enroll in either an approved Off-Campus Cooperative Program or World Capitals program. Acceptable programs must involve a significant period of study outside of the United States. The International Studies advisor in the Department of History and Political Science makes the final determination on acceptable programs.

- POL 391 - World Capitals Program (3-12)

Electives: 8 units from the following (not counted toward concentration)

- POL 301 - Transitions to Democracy (4)
- POL 351 - War and Peace Studies (4)
- POL 420 - United States Foreign Policy (4)
- POL 438 - International Law (4)
- POL 442 - Contemporary Issues in World Politics (4)
- POL 444 - Contemporary Political Ideologies (4)
- POL 455 - Protest and Social Movements in World Politics (4)
- HIS 340 - Russia to 1900 (4)
- HIS 342 - Twentieth-Century Russia and the Soviet Union (4)
- HIS 350 - Islamic Civilization (4)
- HIS 355 - Modern Middle East (4)
- HIS 356 - Early East Asia (4)
- HIS 360 - Modern South Asia (4)
- HIS 365 - Modern Japan and Korea (4)
- HIS 369 - China in Revolution (4)
- HIS 375 - African Cultures and Histories (3)
- HIS 414 - Twentieth-Century Europe (4)
- ECO 315 - Theories of Economic Development (3)
- ECO 410 - International Economics (3) \*
- FCS 315 - Personal, Family, and Community Health (GE) (3)

- SOC 350 - Urban Sociology **(3)** \*
- SOC 420 - Social Change **(3)** \*

Note(s):

*\*These courses have prerequisites and may increase the total number of units needed for the major.*

## Concentrations: 8 Units

Students must declare a concentration in either Peace Studies or a Geographic Region. Students may also complete an individualized concentration consisting of 8 units of relevant coursework and an approved Off-campus Cooperative Program (OCP). Many OCPs have relevant coursework that will meet the concentration requirements with the advisor's approval. Individualized concentrations must be approved by the Department of History and Political Science.

### Peace Studies

- POL 351 - War and Peace Studies **(4)**
- POL 455 - Protest and Social Movements in World Politics **(4)**

### Europe

- HIS 413 - Nineteenth-Century Europe **(4)**
- HIS 414 - Twentieth-Century Europe **(4)**

### Middle East

- HIS 350 - Islamic Civilization **(4)**
- HIS 355 - Modern Middle East **(4)**

### Russia and the Former Soviet Union

- HIS 340 - Russia to 1900 **(4)**
- HIS 342 - Twentieth-Century Russia and the Soviet Union **(4)**

### Asia

Eight units from:

- HIS 360 - Modern South Asia **(4)**
- HIS 365 - Modern Japan and Korea **(4)**
- HIS 369 - China in Revolution **(4)**

### Latin America

Coursework for concentration available through Off-campus Cooperative Programs.

## Africa

Coursework for concentration available through Off-campus Cooperative Programs.

Total: 51 Units

## Political Science, B.A.

### Program Learning Outcomes

Students who complete the program in Political Science will be able to:

1. Develop an appreciation of the field of politics.
2. Evaluate, design, and apply social science research with respect to political phenomena.
3. Understand and critically assess the processes, theories, and outcomes of political institutions and political behavior.
4. Demonstrate social scientific information literacy.
5. Develop and express ideas in written communication in an effective and scholarly manner.
6. Demonstrate oral communication abilities, particularly to convey complex ideas, recognize diverse viewpoints, and offer empirical evidence of an argument.
7. Construct and evaluate analytical, comprehensive arguments.

### Lower-Division Requirements

- POL 101 - Introduction to Political Science (GE) (3) \*
- POL 165 - American Government (4)
- POL 230 - Introduction to International Relations (4)
- POL 270 - Scope and Methods of Political Science (4)

Total: 15 Units

Note(s):

*\*Meets a requirement in general education*

### Upper-Division Requirements

#### American Government

Four units from:

- POL 341 - Campaigns and Elections in an Electronic Age (4)
- POL 380 - Congress and the Presidency (4)

#### Global Politics

Four units from:

- POL 420 - United States Foreign Policy (4)
- POL 435 - Global Governance (4)

### Comparative Government

- POL 370 - Comparative Politics (4)

### Political Theory

- POL 321 - Western Political Thought (4)

### Capitals Program

- POL 390 - American Capitals Program (9) **OR**
- POL 391 - World Capitals Program (3-12)

### Internships

- POL 460 - Internship in Political Science (2-4) **4 Units required**

### Electives

Eight additional units from:

- POL 301 - Transitions to Democracy (4)
- POL 320 - U.S. Constitution and Civil Liberties Law (4)
- POL 325 - American Political Thought (4)
- POL 330 - The Development of Feminist Thought (WS) (4)
- POL 341 - Campaigns and Elections in an Electronic Age (4)
- POL 351 - War and Peace Studies (4)
- POL 360 - Urban Politics (4)
- POL 380 - Congress and the Presidency (4)
- POL 415 - Women and Politics (WS) (4)
- POL 420 - United States Foreign Policy (4)
- POL 435 - Global Governance (4)
- POL 437 - International Economics (4) \*
- POL 438 - International Law (4)
- POL 441 - Issues in Public Policy (4)
- POL 442 - Contemporary Issues in World Politics (4)
- POL 444 - Contemporary Political Ideologies (4)
- POL 450 - Issues of Global Human Rights (2)
- POL 455 - Protest and Social Movements in World Politics (4)
- POL 490 - Special Studies in Political Science (1-4)

Total: 52 Units

Note(s):

*\*Required prerequisite for this course increases the number of units in the major.*

## **Minor**

### **History Minor**

A History minor, consisting of 18 units, is available for those in other majors who nevertheless desire to learn some of the skills and content available to History majors. The requirements are:

#### Requirements

- HIS 110 - World Civilizations I (GE) **(3)**
- HIS 111 - World Civilizations II (GE) **(3)**
- Upper-division Non-Western elective **(4)**
- Upper-division European elective **(4)**
- Upper-division American elective **(4)**

Total: 18 Units

### **Women's Studies Minor**

The minor in Women's Studies affirms the equality and value of women in the university community and curriculum. Significant women in the Wesleyan/holiness movement have consistently contributed to Christian feminism as a central principle of academic and church life. Point Loma has developed a sequence of courses of interest to both women and men that examines important gender issues across a wide variety of academic fields, in light of the university's commitment to the Christian faith.

The minor in Women's Studies is for students who wish to complement study in another area with an interdisciplinary study of women's status and contribution to the world. The program consists of an introductory course, a capstone course, and a selection of applied topics courses at the upper-division level.

Graduation with a minor in Women's Studies requires the following lower-division and upper-division courses:

#### Women's Studies Minor

##### Lower-Division Requirements

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) **(4)**

##### Upper-Division Requirements

- POL 330 - The Development of Feminist Thought (WS) **(4)**

A minimum of nine units from:

- COM 312 - Gender and Communication (WS) (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)
- HIS 475 - Topics in Women's History (WS) (4)
- LIT 353 - Women Writers (GE) (3)
- NSG 446 - Health of Women in a Multicultural World (WS) (3)
- NSG 447 - Family Violence (3)
- POL 415 - Women and Politics (WS) (4)

Total: 17 Units

## Department of Literature, Journalism, and Modern Languages

### Mission Statement

Embodying the core values of a Christian liberal arts education in the Wesleyan theological tradition, and focusing on the power of language and story to shape us and our world, the LJML department and programs will provide students with knowledge, skills, and experiences to equip them to understand, interpret, analyze, evaluate, and create texts as linguistic and/or artistic expressions of diverse human experiences. We value reading, writing, researching, speaking, and discussing as profound means of participating in the redemptive work of God in all of creation.

### Purposes

To enable students to

- critically read and interpret texts through close reading and literary analysis.
- thoughtfully engage with diverse cultures through reading and discussing texts.
- understand the nature, structure, and history of language.
- conduct effective research and produce effective written and oral communication in various genres and media.
- deepen their redemptive social and spiritual engagement with the world through studying languages, texts, and media.

### Tradition of Excellence

The Department of Literature, Journalism, and Modern Languages invites students to enter into the "republic of letters," to become students of the basic component of human interaction: language. The department is committed to helping students learn how to communicate their ideas effectively through the analysis and study of the written word as used in a breadth of literature -- classical and modern, British and American, European, and a wide variety of other western and non-western literatures. The faculty offer different approaches to the subject matter due to their different educational backgrounds. Professors of the department have distinguished themselves by having work published in *Great Lives*, *Great Events -- The Seventeenth Century*, *Great Lives -- The Eighteenth Century*, *Nineteenth Century Literature Criticism*, *Brontë Studies*, *The Ben Jonson Journal*, *The Literary Encyclopedia*, *English Today: The International Review of the English Language*, *Religion and Literature*, *Literature and Belief*, *Christianity and Literature*, *Profession*, *Journal on African Literature: Tydskrif vir Ieterkunde*, *Contemporary French and Francophone Studies*, *Nineteenth Century French Studies*, *La Corónica*, *The Princeton University Library Chronicle*, *The New York Times*,

*Christianity Today, Relevant Magazine, Sojourners, The Journal of Mass Media Ethics, Christian Feminism Today, and the Encyclopedia of Christian Literature.* Faculty members have also published books and poetry collections. They have given lectures and submitted papers at such places as the University of London, the University of Hull, the University of Leeds, Charles University, Prague, UCLA, Princeton University, and the American Association of Teachers of Spanish and Portuguese in Madrid, Spain. Department faculty have also received major national grants including several from the National Endowment for the Humanities, the Fulbright Fellowship Grant, and the Del Amo Foundation.

## **Career Opportunities**

Students who have graduated from the Department of Literature, Journalism, and Modern Languages have been accepted into some of the finest graduate schools in the country. In addition to careers in law, education, journalism, publishing, and public relations, graduates from our department are active in a variety of business fields, in theological study and church ministry, in work with NGOs and the National Park Service, and in overseas teaching. Internship programs with local newspapers and magazines are also established to create contacts and experience for our students to gain employment in technical writing, business writing, copy writing and editing, and newspaper reporting.

## **Faculty**

Scott M. Bennett, Ph.D.  
*University of California, Santa Barbara*

Carol A. Blessing, Ph.D., Chair  
*University of California, Riverside*

Paula T. Cronovich, Ph.D.  
*University of California, Los Angeles*

Stephen H. Goforth, M.A.  
*The American University*

Richard A. Hill, Ph.D.  
*University of Louisiana, Lafayette*

Alain M. Lescart, Ph.D.  
*University of Connecticut*

Katie D. Manning, Ph.D.  
*University of Louisiana, Lafayette*

Karl E. Martin, Ph.D.  
*University of Minnesota*

David Michael McKinney, Ph.D.  
*University of Southern California*

Jacqueline Mitchell, M.A.  
*University of California, Los Angeles*

Dean E. Nelson, Ph.D.  
*Ohio University*

Charlene K. Pate, M.A.  
*California State University, San Marcos and San Diego State University*

Bettina Tate Pedersen, Ph.D.  
*University of Illinois, Urbana-Champaign*

James A. Wicks, Ph.D.  
*University of California, San Diego*

Carl A. Winderl, Ph.D.  
*New York University*

## **Major**

### **French, B.A.**

#### Program Learning Outcomes

**Students who complete the program in French will be able to:**

1. Write essays without significant errors of grammar, spelling, or vocabulary usage that would impede comprehension by a native speaker.
2. Comprehend the main idea and most details of connected oral discourse by a native speaker on a variety of topics.
3. Converse in a participatory fashion with a native speaker using a variety of language strategies to convey meaning.
4. Analyze and interpret target language texts and data sets according to their cultural, literary, and/or linguistic content.
5. Display knowledge of the nature and structure of language.
6. Discuss the influence of their own perspective on cultural interconnections through engagement with local, national, or international communities.

#### Lower-Division Requirements

- FRE 101 - Elementary French I (GE) **(4)**
- FRE 102 - Elementary French II (GE) **(4)**
- FRE 250 - Intermediate French I **(3)**
- FRE 251 - Intermediate French II **(3)**  
**OR** Equivalent
- LIT 250 - Introduction to the Study of Literature **(3)**

Total: 17 Units

#### Upper-Division Requirement

*In addition to the courses listed below, two courses must be taken abroad in France or a Francophone country (6 units) or 9 units of which 3 could be equivalent to one PLNU courses. Subject to Department approval. 6-9 Units.*

- FRE 303 - French Conversation **(3)**
- FRE 315 - French Culture and Civilization **(3)**
- FRE 320 - Survey of French Literature **(3)**
- FRE 325 - Francophone Literature **(3)**

- FRE 420 - Studies in French Literature (3)
- LIT 495 - Literary Theory and Scholarship (3)

Total: 24-27 Units

Total Major: 41-44 Units

## Literature, B.A.

### Concentrations

- Literature
- English Education

### Program Learning Outcomes

**Students who complete the program in Literature - Concentrations in Literature and English Education will be able to:**

1. Integrate their literature studies with ongoing reflection and hospitable engagement with a diverse world.
2. Identify and articulate characteristics and trends of diverse literatures and historical periods: dates, styles, authors, and canon formation.
3. Develop and support close readings of texts using literary theory and terminology.
4. Articulate the difference between a traditional pedagogical and a modern linguistics notion of language.
5. Employ strong research, rhetorical, literary, and analytical skills in their writing.
6. Present literary analysis to formal audiences, demonstrating strategies for audience engagement and oral communication of written work.

### Concentrations

#### Literature

#### Lower-Division Requirements

- LIT 250 - Introduction to the Study of Literature (3)
- LIT 252 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 254 - British Writers I (3)
- LIT 255 - British Writers II (3)
- LIT 256 - American Writers I (3)
- LIT 257 - American Writers II (3)

Total Lower Division Units: 18

#### Upper-Division Requirements

- LIT 400 - American Literature to 1900 (3)
- LIT 448 - Postcolonial Classics and Theory (3)

- LIT 450 - The Novel (3)
- LIT 461 - Shakespeare (3)
- LIT 495 - Literary Theory and Scholarship (3)

One course from the following:

- LIN 312 - Introduction to Linguistics (3)
- LIN 365 - English Grammar and Usage (3)

One course from the following:

- LIT 350 - World Literature (GE) (3)
- LIT 351 - World Cinema (GE) (3)

One course from the following:

- LIT 352 - Diverse Voices in American Literature (GE) (3)
- LIT 353 - Women Writers (GE) (3)

One course from the following:

- LIT 420 - American Literature Since 1900 (3)
- SPA 320 - Mexican American Literature and Culture (3)

Three courses from the following:

- LIT 444 - Medieval Literature (3)
- LIT 445 - 17th Century English Literature (3)
- LIT 446 - Romantic Literature (3)
- LIT 447 - Victorian Literature (3)

Total Upper Division Units: 36

Total Major: 54 Units

## English Education

### Lower-Division Requirements

- LIT 250 - Introduction to the Study of Literature (3)
- LIT 252 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 254 - British Writers I (3)
- LIT 255 - British Writers II (3)
- LIT 256 - American Writers I (3)
- LIT 257 - American Writers II (3)

**Choose one course from:**

- WRI 220 - Introduction to Creative Writing (3)
- JRN 250 - Introduction to Journalism (3)

Total Lower Division Units: 21

**Upper-Division Requirements**

- LIN 312 - Introduction to Linguistics (3)
- LIN 365 - English Grammar and Usage (3)
- LIT 448 - Postcolonial Classics and Theory (3)
- LIT 450 - The Novel (3)
- LIT 461 - Shakespeare (3)
- LIT 495 - Literary Theory and Scholarship (3)
- WRI 315 - Advanced English Composition (3)
- WRI 370 - Writing Theory and Pedagogy (2)

One course from the following:

- LIT 400 - American Literature to 1900 (3)
- LIT 420 - American Literature Since 1900 (3)
- SPA 320 - Mexican American Literature and Culture (3)

One course from the following:

- LIT 444 - Medieval Literature (3)
- LIT 445 - 17th Century English Literature (3)

One course from the following:

- LIT 446 - Romantic Literature (3)
- LIT 447 - Victorian Literature (3)

Total Upper Division Units: 32

Total Major: 53 Units

**Teacher Preparation**

To complete requirements for a preliminary Single Subject (Secondary) California teaching credential, students who pursue the concentration in English Education must pass the CSET Examination in English (including Composition and Rhetoric, Literature, and Linguistics) to demonstrate Subject Matter Competency and complete the Professional Preparation coursework and other items as required by the commission on Teacher Credentialing (CTC).

**Multimedia Journalism, B.A.**

**Program Learning Outcomes**

**Students who complete the program in Multimedia Journalism will be able to:**

1. Exhibit effective research and reporting practices including the creation and editing of a news story based on accepted industry standards and values.
2. Display strong interpretive, analytic, and critical thinking skills by writing news copy clearly and accurately, demonstrating quantitative and qualitative reasoning in forms appropriate to the purpose, medium, and audience.
3. Identify and apply appropriate ethical and legal standards in their service to their communities and cultures.
4. Employ delivery skills appropriate to various news performance situations.
5. Describe how technologies shape the way people perceive and interact with the world and apply these digital tools and technologies appropriately for the communications professions in which they work.

## Lower-Division Requirements

- JRN 215 - Newspaper Workshop (1) \*
- JRN 250 - Introduction to Journalism (3)
- COM 150 - Introduction to Media Communication (3)
- COM 243 - Introduction to TV and Film Production (3)

One course from the following:

- LIT 252 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 254 - British Writers I (3)
- LIT 255 - British Writers II (3)
- LIT 256 - American Writers I (3)
- LIT 257 - American Writers II (3)

Total: 15 Units

Note(s):

*\* Three units of Newspaper Workshop. WRI 216, JRN 217, JRN 218, or COM 275 may substitute for two of those units.*

## Upper-Division Requirements

- JRN 314 - Computer-Assisted Reporting (3)
- JRN 340 - Media Law and Ethics (3)
- JRN 350 - Special Topics in Journalism (3)
- JRN 430 - Multimedia Journalism (3)
- JRN 470 - Internship in Journalism (2)
- JRN 495 - Senior Seminar in Multimedia Journalism (3)
- **One additional upper-division literature course beyond GE from the courses listed under Literature, Spanish, or French.**

Total: 20 Units

Choose One Concentration:

### Concentration in Writing

- JRN 310 - Advanced Reporting (3)
- JRN 345 - Editing (3)
- JRN 440 - Magazine Editing and Concepts (3)

**Choose one course from the following:**

- WRI 315 - Advanced English Composition (3)
- WRI 321 - Creative Writing: Poetry (3)
- WRI 322 - Creative Writing: Fiction (3)
- WRI 323 - Creative Writing: Creative Nonfiction (3)

Total: 12 Units

### Concentration in Visual Storytelling

- JRN 312 - Television News Writing (3)
- JRN 313 - Television News Production (3)
- JRN 413 - Advanced Television News Production (3)
- JRN 414 - Long-Form Broadcast News (3)
- JRN 425 - Advanced Television Workshop (1)

Total: 13 Units

Major Total: 47-48 Units

## Multimedia Journalism Major with a Minor in Spanish

The Department offers a Multimedia Journalism major with a Spanish Minor. This extremely marketable and desirable combination is recommended for Multimedia Journalism majors who desire to work in American border cities or in Latin American countries, as well as for students seeking a Single-Subject Teaching Credential. The student completes an internship at a bilingual newspaper, magazine, radio, or television station. A maximum of two of the required upper-division literature courses in the Multimedia Journalism major may be in Spanish or Latin American literature.

## Spanish, B.A.

### Program Learning Outcomes

**Students who complete the program in Spanish will be able to:**

1. Write essays without significant errors of grammar, spelling, or vocabulary usage that would impede comprehension by a native speaker.
2. Comprehend the main idea and most details of connected oral discourse by a native speaker on a variety of topics.

3. Converse in a participatory fashion with a native speaker using a variety of language strategies to convey meaning.
4. Analyze and interpret target language texts and data sets according to their cultural, literary, and/or linguistic content.
5. Display knowledge of the nature and structure of language.
6. Discuss the influence of their own perspective on cultural interconnections through engagement with local, national, or international communities.

Students desiring to become secondary Spanish teachers should take EDU 302 , EDU 404 , and EDU 306 their junior and senior years. These courses must be taken in given order.

It is recommended that prospective majors who anticipate doing graduate work in Spanish become familiar with French or German. They should also plan to take collateral courses in British, American, French, or Russian literature; philosophy; and history.

## Lower-Division Requirements

- SPA 101 - Elementary Spanish I (GE) **(4)**
- SPA 102 - Elementary Spanish II (GE) **(4)**
  
- SPA 250 - Intermediate Spanish I **(3)**
- SPA 251 - Intermediate Spanish II **(3)**
  
- LIT 250 - Introduction to the Study of Literature **(3)**

Total: 17 Units

## Upper-Division Requirements

- SPA 302 - Advanced Grammar and Reading **(3)**
- SPA 303 - Advanced Conversation and Composition **(3)**
- SPA 310 - Latin American Culture and Civilization **(3)**
- SPA 315 - Culture and Civilization of Spain **(3)**
- SPA 320 - Mexican American Literature and Culture **(3)**
- SPA 380 - Genre/period Studies in Hispanic Literature or Film **(3)**
- SPA 390 - Current Spanish Linguistics **(3)**
- SPA 485 - Senior Seminar in Spanish **(1)**

One of the following:

- SPA 400 - Peninsular Literature Before 1800 **(3)**
- SPA 402 - Peninsular Literature Since 1800 **(3)**

One of the following:

- SPA 437 - Latin American Literature Before 1910 **(3)**
- SPA 439 - Latin American Literature Since 1910 **(3)**

Note(s):

Take six upper-division study-abroad units approved by the Department and Dean of the College of Arts and Humanities. Study abroad courses can substitute for or complement courses required in the major.

Total: 28 Units

Total Major: 45 Units

## **Writing, B.A.**

### Program Learning Outcomes

**Students who complete the program in Writing will be able to:**

1. Apply creative and advanced skills in various forms and genres of writing, demonstrating critical thinking and quantitative reasoning appropriately.
2. Demonstrate knowledge of the conventions and terminology of creative and advanced writing within literary and non-literary texts.
3. Demonstrate knowledge of major literary-theoretical perspectives and terminology.
4. Develop connections between the literature and language studied and the contemporary world.
5. Engage in writing and editorial processes through campus publications and external internships.
6. Present creative work to formal audiences, demonstrating strategies for audience engagement and oral communication of written work.

### Lower-Division Requirements

- WRI 220 - Introduction to Creative Writing (3)
- JRN 250 - Introduction to Journalism (3)
- LIT 250 - Introduction to the Study of Literature (3)

One course from the following:

- LIT 254 - British Writers I (3)
- LIT 255 - British Writers II (3)
- LIT 256 - American Writers I (3)
- LIT 257 - American Writers II (3)

Four units from the following:

- JRN 215 - Newspaper Workshop (1) \*\*
- WRI 216 - Literary Magazine Workshop (1) \*\*
- JRN 217 - Yearbook Workshop (1) \*\*

Note(s):

*\*\*Each may be taken more than once (may substitute JRN 314 for two units of JRN 215/WRI 216/JRN 217).*

Total: 13 Units

## Creative Writing Courses

Six (6) units from the following list:

**WRI 321, 322, and 323 may be repeated once for credit with instructor's consent.**

- WRI 321 - Creative Writing: Poetry (3)
- WRI 322 - Creative Writing: Fiction (3)
- WRI 323 - Creative Writing: Creative Nonfiction (3)

Total: 6 Units

## Upper-Division Requirements

- WRI 315 - Advanced English Composition (3)
- JRN 345 - Editing (3) **OR**
- JRN 440 - Magazine Editing and Concepts (3)
- WRI 420 - Advanced Writing Workshop (3)
- WRI 365 - Writing for Professional Careers (3)
- WRI 470 - Internship in Writing (2)

One course from the following:

- LIN 312 - Introduction to Linguistics (3)
- LIN 365 - English Grammar and Usage (3)

One course from the following not already taken:

- WRI 370 - Writing Theory and Pedagogy (2)
- JRN 430 - Multimedia Journalism (3)
- JRN 440 - Magazine Editing and Concepts (3)

## Upper Division Literature course

One additional upper division literature course beyond GE from courses listed under Literature, Spanish or French. (3)

Total: 22-23 Units

Total Major: 44-45 Units

## Minor

### **Cinema Studies Minor - Literature, Journalism and Modern Language**

This is an interdisciplinary minor in cinema which draws from historical, religious, philosophical, theoretical, and aesthetic perspectives. Students are encouraged to select courses which are based on students' intellectual and professional interests. Students interested in film criticism and/or writing and teaching may take electives in film theory and criticism, while students interested in scriptwriting and production may take courses in those areas. The minor is structured as interdisciplinary in its electives so that students will truly be studying in the liberal arts tradition. All students must take the required courses, and then must select from the elective courses to complete the minor.

## **Program Learning Outcomes**

1. Identify and articulate the relationships among film styles, genres, and techniques.
2. Demonstrate knowledge of the relationship between films and the historical moments from which they emerge.
3. Analyze and interpret the film images and narratives using film theory and terminology.
4. Evaluate films, including from a faith based perspective, by using higher and lower order thinking and writing skills.
5. Construct film scripts and create films by using film production techniques.

## **Core Courses**

- LIT 200 - Literature and Culture (GE) (2) \*
- COM 243 - Introduction to TV and Film Production (3)
- COM 300 - Narrative and Documentary Film (3)

## **Total: 8 Units**

### **Notes:**

\* LIT 200 Literature and Culture course subtitle must be "Film Adaptation".

COM 175 is recommended, but cannot be substituted for required of elective course for this minor.

## **Elective Courses: Nine (9) elective units taken from three (3) separate disciplines**

### **Communication**

- COM 420 - Communication Practicum II (1-2)
- COM 442 - Field Television Production (3)
- COM 443 - Studio Television Production (3)
- COM 490 - Special Studies in Communication (1-3)

### **History**

- HIS 368 - Modern China Through Film (4)
- HIS 490 - Special Studies in History (1-4)

## Literature, Journalism, and Modern Languages

- LIT 351 - World Cinema (GE) (3)
- LIT 490 - Special Studies in Literature (1-3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 490 - Special Studies in Spanish (1-3)

## Theology and Christian Ministry

- PHL 380 - Alienation, Transformation, and Reconciliation in Film (3)

## Total for Minor: 17-20 Units

### French Minor

A minor in French is offered to those who wish to complement study in another discipline. Course work can only approximate a bilingual setting and does not necessarily guarantee appropriate language proficiency. Therefore, students are encouraged to immerse themselves in the target language and to complete more than the minimum amount of language classes.

### Requirements

- Undergo a complete summative evaluation of language skills by way of an exit interview.
- Successfully complete at least 9 upper-division units in residence.
- Successfully complete the following courses:

### Lower-Division Requirements

- FRE 101 - Elementary French I (GE) (4)
  - FRE 102 - Elementary French II (GE) (4)
  - FRE 250 - Intermediate French I (3)
  - FRE 251 - Intermediate French II (3)
- OR Equivalent

Total: 14 Units

### Upper-Division Requirements

- FRE 303 - French Conversation (3)
- FRE 315 - French Culture and Civilization (3)
- FRE 320 - Survey of French Literature (3)
- FRE 325 - Francophone Literature (3)

Total: 12 Units

Total for Minor: 26 Units

## **Literature Minor**

### Lower Division Requirements

- LIT 200 - Literature and Culture (GE) (2)
- LIT 250 - Introduction to the Study of Literature (3)

Total Lower Division Units: 5

### Upper Division Requirements

- LIT 461 - Shakespeare (3)
- **One Course From:**
  - LIT 350 - World Literature (GE) (3)
  - LIT 351 - World Cinema (GE) (3)
  - LIT 352 - Diverse Voices in American Literature (GE) (3)
  - LIT 353 - Women Writers (GE) (3)
- *Two Additional Non-GE Upper Division LIT courses (6 units)*

Total Upper Division Units: 12

Total Units: 17

## **Public Relations Minor**

The minor in Public Relations is an interdepartmental minor, shared by the Fermanian School of Business, the Department of Literature, Journalism, and Modern Languages, and the Department of Communication and Theatre.

### Requirements

- MKT 332 - Principles of Marketing (3)
- COM 330 - Persuasion (3)
- COM 390 - Introduction to Public Relations (3)
- COM 405 - Public Relations Cases and Campaigns (3)
- JRN 250 - Introduction to Journalism (3)
- JRN 355 - Public Relations Writing (3)

Minor Total: 18 Units

## **Spanish Minor**

A minor in Spanish is offered to those who wish to complement study in another discipline. Course work can only approximate a bilingual setting and does not necessarily guarantee appropriate language proficiency. Therefore, students are encouraged to immerse themselves in the target language and to complete more than the minimum amount of language classes.

### Lower Division Requirements:

- SPA 101 - Elementary Spanish I (GE) (4)
- SPA 102 - Elementary Spanish II (GE) (4)
- SPA 250 - Intermediate Spanish I (3)
- SPA 251 - Intermediate Spanish II (3)

### Upper Division Requirements:

- SPA 302 - Advanced Grammar and Reading (3)
- SPA 303 - Advanced Conversation and Composition (3)

Complete a total of two courses from two different categories below:

#### Literature

- SPA 320 - Mexican American Literature and Culture (3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 400 - Peninsular Literature Before 1800 (3)
- SPA 402 - Peninsular Literature Since 1800 (3)
- SPA 437 - Latin American Literature Before 1910 (3)
- SPA 439 - Latin American Literature Since 1910 (3)

#### Culture

- SPA 310 - Latin American Culture and Civilization (3)
- SPA 315 - Culture and Civilization of Spain (3)

#### Linguistics

- SPA 390 - Current Spanish Linguistics (3)

Total: 26 Units

#### Notes:

- Student will undergo a complete summative evaluation of language skills by way of an exit interview.
- Student will successfully complete at least 9 upper-division units in residency.

### **Women's Studies Minor**

The minor in Women's Studies affirms the equality and value of women in the university community and curriculum. Significant women in the Wesleyan/holiness movement have consistently contributed to Christian feminism as a central principle of academic and church life. Point Loma has developed a sequence of courses of interest to both women and men that examines important gender issues across a wide variety of academic fields, in light of the university's commitment to the Christian faith.

The minor in Women's Studies is for students who wish to complement study in another area with an interdisciplinary study of women's status and contribution to the world. The program consists of an introductory course, a capstone course, and a selection of applied topics courses at the upper-division level.

Graduation with a minor in Women's Studies requires the following lower-division and upper-division courses:

## Women's Studies Minor

### Lower-Division Requirements

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)

### Upper-Division Requirements

- POL 330 - The Development of Feminist Thought (WS) (4)

A minimum of nine units from:

- COM 312 - Gender and Communication (WS) (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)
- HIS 475 - Topics in Women's History (WS) (4)
- LIT 353 - Women Writers (GE) (3)
- NSG 446 - Health of Women in a Multicultural World (WS) (3)
- NSG 447 - Family Violence (3)
- POL 415 - Women and Politics (WS) (4)

Total: 17 Units

## Writing Minor

A minor in Writing is offered to those who wish to complement study in another discipline. The ability to write effectively and interpret written material skillfully makes Writing a marketable minor in all fields.

### Lower-Division Requirements

Select one course from the following:

- WRI 220 - Introduction to Creative Writing (3)
- JRN 250 - Introduction to Journalism (3)
- COM 175 - Scriptwriting for Television and Film (3)

## Upper-Division Requirements

- WRI 365 - Writing for Professional Careers (3)

Select three courses from the following:

- JRN 312 - Television News Writing (3) \*
- JRN 314 - Computer-Assisted Reporting (3) \*
- WRI 315 - Advanced English Composition (3)
- WRI 321 - Creative Writing: Poetry (3)
- WRI 322 - Creative Writing: Fiction (3)
- WRI 323 - Creative Writing: Creative Nonfiction (3)
- JRN 345 - Editing (3) \*
- JRN 355 - Public Relations Writing (3) \*
- WRI 370 - Writing Theory and Pedagogy (2) \*
- WRI 420 - Advanced Writing Workshop (3) \*
- JRN 440 - Magazine Editing and Concepts (3) \*
- WRI 490 - Special Studies in Writing/Journalism (1-3) \*
- LIN 312 - Introduction to Linguistics (3)
- LIN 365 - English Grammar and Usage (3)
- COM 414 - Long-Form Broadcast News (3) \*
- TRE 490 - Special Studies in Theatre (1-3) (with playwriting content)

Note(s):

*\*Course carries a pre-requisite.*

Select two units from the following:

- JRN 215 - Newspaper Workshop (1) \*\*
- WRI 216 - Literary Magazine Workshop (1) \*\*
- JRN 217 - Yearbook Workshop (1) \*\*

Note(s):

\*\*Each may be taken more than once (may substitute WRI 470 - Internship in Writing for two units of JRN 215/WRI 216/JRN 217).

Total: 16-17 Units

## Certificate

### French Language Certificate

A French Language Certificate is for students interested in....

## Certificate Requirements

- FRE 250 - Intermediate French I (3) \*
- FRE 251 - Intermediate French II (3)
- FRE 303 - French Conversation (3)

\* FRE101 and FRE102 are pre-requisites to FRE250.

Total Units for the Certificate: 9

## Department of Music

### Purposes

The mission of the Department of Music is to pursue musical excellence within a community of grace. The department seeks to develop 1) leaders in education, composition, performance, and worship, 2) life-long participants in music who are critical thinkers, discerning listeners, creative composers, skilled performers, and worshipful servants of Jesus Christ, and 3) an atmosphere that fosters individual and corporate growth, high performance standards, community service, the spirit of Christ, and worship and praise.

### Tradition of Excellence

For many years, the Department of Music has been recognized for the quality of its programs. In addition, the Department of Music has achieved accreditation by the National Association of Schools of Music (NASM). Faculty members are performing artists who frequently give recitals, serve as guest conductors, clinicians, or adjudicators and compose or arrange for publication. As a result of the faculty's professional guidance, students are encouraged on toward successful careers.

### Career Opportunities

At PLNU, every student is assured of many performance opportunities through the university's performing ensembles. Point Loma music ensembles travel all over the world in addition to performing in churches throughout California, Arizona, Nevada, and New Mexico. Students are actively involved in church music programs in the San Diego area as directors, soloists, worship leaders, and instrumentalists. Point Loma graduates are sought after by schools, churches, and businesses because of the university's academic reputation. A number of graduates go directly into teaching positions and many are involved in church music as full-time music ministers. During the past two decades, students have been accepted into graduate schools such as USC, Indiana University, University of Missouri, University of Illinois, Arizona State University, San Diego State University, and many others. Several graduates have been successful in writing music for television and films, and in music publishing and music editing.

### Eligibility for all Music Majors

All students, both entering freshmen and transfer students, are accepted provisionally to the music majors pending final approval by the music faculty and demonstration of all competencies.

### Scholarships

Generous scholarships in music are available to students. These are given on the basis of auditions and are renewable. Applications may be secured through the department office at 619-849-2445.

## Performing Ensembles

PLNU offers a full range of performing ensembles, including Choral Union, Concert Choir, Point Loma Singers, Chorale, Vocal Jazz Ensemble, Concert Band, Jazz Band, and Chamber Orchestra. Each music major participates in at least one of these groups. Many students from other departments also participate.

## Private Instruction

Course numbers for each of the performing areas are given by year in the following table:

<b>1st Year</b>	<b>2nd Year</b>	<b>3rd Year</b>	<b>4th Year</b>
<b>Private Voice</b>			
MUA 155	MUA 255	MUA 355	MUA 455
<b>Private Piano</b>			
MUA 156	MUA 256	MUA 356	MUA 456
<b>Private Organ</b>			
MUA 157	MUA 257	MUA 357	MUA 457
<b>Private Harpsichord</b>			
MUA 158	MUA 258	MUA 358	MUA 458
<b>Private Violin</b>			
MUA 159	MUA 259	MUA 359	MUA 459
<b>Private Viola</b>			
MUA 160	MUA 260	MUA 360	MUA 460
<b>Private Violoncello</b>			
MUA 161	MUA 261	MUA 361	MUA 461
<b>Private String Bass</b>			
MUA 162	MUA 262	MUA 362	MUA 462
<b>Private Guitar</b>			
MUA 163	MUA 263	MUA 363	MUA 463
<b>Private Harp</b>			

MUA 164            MUA 264            MUA 364            MUA 464

**Private Flute**

MUA 165            MUA 265            MUA 365            MUA 465

**Private Oboe**

MUA 166            MUA 266            MUA 366            MUA 466

**Private Clarinet**

MUA 167            MUA 267            MUA 367            MUA 467

**Private Saxophone**

MUA 168            MUA 268            MUA 368            MUA 468

**Private Bassoon**

MUA 169            MUA 269            MUA 369            MUA 469

**Private Trumpet**

MUA 170            MUA 270            MUA 370            MUA 470

**Private Trombone**

MUA 171            MUA 271            MUA 371            MUA 471

**Private French Horn**

MUA 172            MUA 272            MUA 372            MUA 472

**Private Euphonium**

MUA 173            MUA 273            MUA 373            MUA 473

**Private Tuba**

MUA 174            MUA 274            MUA 374            MUA 474

**Private Percussion**

MUA 175            MUA 275            MUA 375            MUA 475

## **Faculty**

William P. Clemmons, Ph.D., Co-chair  
*City University of New York*

John W. Dally, Jr., M.M.  
*Sam Houston State University*

Daniel S. Jackson, D.W.S., Co-chair  
*Institute for Worship Studies*

John Craig Johnson, D.M.A.  
*University of Southern California*

Victor K. Labenske, D.M.A.  
*University of Southern California*

Keith E. Pedersen, D.M.A.  
*University of Illinois*

Philip W. Tyler, D.Mus.  
*Florida State University*

## **Major**

### **Composition, Bachelor of Music**

#### **Program Learning Outcomes**

*Students who complete the program in Composition will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate mastery of advanced tonal, timbral and formal concepts.
6. Synthesize applications of diverse genres and media in the composition of original works using small and large ensembles, atonal materials, and electronic media.
7. Produce a substantial body of original compositions using a variety of tonal languages, performance forces and expressive content.

#### **Core Curriculum**

*(Required of all Music majors)*

#### **Applied:**

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

#### **Music History:**

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**

- MUH 334 - World Music (2)
- MUH 431 - Faith, Life, and Music (2)

### Music Theory:

- MUT 120 - Music Theory I (4)
- MUT 121 - Music Theory II (4)
- MUT 220 - Music Theory III (3)

Total: 31 Units

### Requirements

*For the Bachelor in Music with a concentration in Composition, the following courses are required in addition to the Core Curriculum indicated above :*

- MUC 252 - Private Composition (1-2) (2) **Units required**
  - MUC 352 - Private Composition (1-2) (4) **Units required**
  - MUC 452 - Private Composition (1-2) (4) **Units required**
  - MUC 477 - Senior Recital in Composition (0)
  - MUA 101 - Recital Attendance - 4 semesters (0) - 4 semesters
  - MUA 313 - Instrumental Conducting (2) **OR**
  - MUA 312 - Choral Conducting and Literature (2)
  - MUH 333 - Music History and Literature III (2)
  - *Upper-division music theory (12)*
  - *Voice (class or private) (2)*
  - *One-unit Ensembles (4)*
  - *Music Electives (15)*
- Total additional requirements: 47 units**

### Special Requirements

1. A solo Junior Recital of at least 30 minutes given during the junior or senior year is required of Music majors selecting majors in Performance and Music Education. The student must achieve the 300-level of proficiency before scheduling the Junior Recital. The student must also enroll for the appropriate level of applied study during the semester of the recital performance.
2. Students accepted into performance degree programs must achieve the 300-level of proficiency in their performing area and give a Junior Recital during their junior year. They must also achieve the 400- level of proficiency and give a solo Senior Recital , one hour in length, during their senior year. The performance degree programs are reserved for students of marked talent and proficiency.
3. For graduation, Bachelor of Music and Music Education majors must earn credit in a one-unit ensemble for a minimum of eight semesters. Bachelor of Arts majors must earn credit in a one-unit ensemble for a minimum of four semesters. Wind, string, and percussion students meet this requirement by performing in the Concert Band or Chamber Orchestra. Vocalists meet this requirement by performing in Chorale, Concert Choir or Point Loma Singers. Keyboard students may choose either choral or instrumental ensembles.
4. Music majors are required to perform in Monday afternoon student recitals at least once per semester until applied study requirements are completed.

# Instrumental Performance, Bachelor of Music

## Program Learning Outcomes

*Students who complete the program in Instrumental Performance will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

## Core Curriculum

*(Required of all Music majors)*

### Applied:

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**
- MUH 334 - World Music **(2)**
- MUH 431 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 120 - Music Theory I **(4)**
- MUT 121 - Music Theory II **(4)**
- MUT 220 - Music Theory III **(3)**

Total: 31 Units

## Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 101 - Recital Attendance - 4 semesters (0)
- MUA 313 - Instrumental Conducting (2)
- MUA 376 - Junior Recital (0)
- MUA 476 - Senior Recital (0)
- *Applied Music in major performance area* (12)
- MUE 312 - Instrumental Pedagogy (2)
- MUE 451 - Internship in Music (2)
- MUH 312 - Instrumental Literature (2)
- MUH 333 - Music History and Literature III (2)
- MUP 339 - Small Ensemble (1/2) **4 Units required**
- *One-unit Ensembles* (4)
- *Upper-division Theory* (6)
- *Music Electives* (11)

Total: 47 Units

## **Music Education, B.A.**

### Program Learning Outcomes

**Students who complete the program in Music Education will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Develop a broad conceptual understanding of music learning in elementary and secondary schools settings and pedagogical methods appropriate to each level.
6. Develop more advance applied music skills in a principal performance area.

### Core Curriculum

*(Required of all Music majors)*

#### Applied:

- MUA 101 - Recital Attendance - 4 semesters (0) - 4 semesters
- MUA 201 - Piano Proficiency Exam (0)
- MUA 212 - Beginning Conducting (2)
- *Applied Music in major performing area* (4)
- *One-unit Ensembles* (4)

#### Music History:

- MUH 101 - Introduction to Listening (GE) (2)
- MUH 331 - Music History and Literature I (2)
- MUH 332 - Music History and Literature II (2)
- MUH 334 - World Music (2)
- MUH 431 - Faith, Life, and Music (2)

### Music Theory:

- MUT 120 - Music Theory I (4)
- MUT 121 - Music Theory II (4)
- MUT 220 - Music Theory III (3)

Total: 31 Units

### Requirements

**The following courses are required in addition to the Core Curriculum indicated above:**

- MUE 201 - Woodwind Instruments (1)
- MUE 202 - Brass Instruments (1)
- MUE 203 - Percussion Instruments (1)
- MUE 204 - String Instruments (1)
- MUE 303 - Choral and Vocal Techniques (2)
- MUE 441 - Elementary School Music Methods (3)
- MUE 454 - Secondary School Music Methods (3)
- MUH 333 - Music History and Literature III (2)
- MUA 101 - Recital Attendance - 4 semesters (0)
- MUA 312 - Choral Conducting and Literature (2)
- MUA 313 - Instrumental Conducting (2)
- MUA 376 - Junior Recital (0)
- *Applied Music in major performing area (4)*
- *Voice (class or private) (2)*
- *One-unit Ensembles (4)*
- Upper Division MUT (3)
- Music Electives (2)

Total: 33 Units

### Note(s):

Additional requirements for the California Teaching Credential are listed in the School of Education under the Single-Subject credential. The Teaching Credential requires an extra year after the B.A. degree is earned.

### **Music with a Concentration in Music and Ministry, B.A.**

#### Program Learning Outcomes

**Students who complete the program in Music with a Concentration in Music and Ministry will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate substantial knowledge of the traditions, techniques and materials used in worship music.
6. Complete a semester-long internship where students are placed in church music ministry settings, and given leadership responsibilities with the support of a professional music staff member.

## Core Curriculum

*(Required of all Music majors)*

### Applied:

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**
- MUH 334 - World Music **(2)**
- MUH 431 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 120 - Music Theory I **(4)**
- MUT 121 - Music Theory II **(4)**
- MUT 220 - Music Theory III **(3)**

Total: 31 Units

## Requirements

**The following courses are required in addition to the Core Curriculum indicated above:**

- CMU 201 - Instruments in Worship **(2)**
- CMU 202 - Multi-Media for Worship Ministry **(2)**
- CMU 314 - Music and Worship **(3)**

- CMU 315 - Church Music Administration and Materials (2)
- CMU 433 - Hymnology (3)
- CMU 451 - Internship in Church Music (2)
- MUA 312 - Choral Conducting and Literature (2)
- MUH 333 - Music History and Literature III (2)

Total: 16 Units

Note(s):

**A minor from the following list is recommended:**

Youth Ministry, Theatre, Communication, or Media Communication

## Music, B.A.

### Program Learning Outcomes

*Students who complete the program in Music will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.

### Core Curriculum

*(Required of all Music majors)*

Applied:

- MUA 101 - Recital Attendance - 4 semesters (0) - 4 semesters
- MUA 201 - Piano Proficiency Exam (0)
- MUA 212 - Beginning Conducting (2)
- *Applied Music in major performing area (4)*
- *One-unit Ensembles (4)*

Music History:

- MUH 101 - Introduction to Listening (GE) (2)
- MUH 331 - Music History and Literature I (2)
- MUH 332 - Music History and Literature II (2)
- MUH 334 - World Music (2)
- MUH 431 - Faith, Life, and Music (2)

## Music Theory:

- MUT 120 - Music Theory I (4)
- MUT 121 - Music Theory II (4)
- MUT 220 - Music Theory III (3)

Total: 31 Units

## Requirements

### In addition to the Core Curriculum Requirements Above:

- Choose 2 units of upper division MUH chosen from: MUH309, 310, 311, 312 or 333 (2)
- Choose 2 units from upper division MUE OR any two from MUE201, 202, 203 and 204 (2)
- AND an additional 13 units of which 7 must be Upper Division (13)

Total: 17 Units

## Note(s):

*A minor from the following list is recommended:*

Theatre, Media Communication, or Business Administration

## Piano Performance, Bachelor of Music

### Program Learning Outcomes

#### Students who complete the program in Piano Performance will be able to:

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

## Core Curriculum

*(Required of all Music majors)*

## Applied:

- MUA 101 - Recital Attendance - 4 semesters (0) - 4 semesters

- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**
- MUH 334 - World Music **(2)**
- MUH 431 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 120 - Music Theory I **(4)**
- MUT 121 - Music Theory II **(4)**
- MUT 220 - Music Theory III **(3)**

Total: 31 Units

### Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 101 - Recital Attendance - 4 semesters **(0)**
- MUA 256 Piano **(4)**
- MUA 356 Piano **(4)**
- MUA 456 Piano **(4)**
- MUA 313 - Instrumental Conducting **(2)** *OR*
- MUA 312 - Choral Conducting and Literature **(2)**
- MUA 376 - Junior Recital **(0)**
- MUA 476 - Senior Recital **(0)**
- Voice (class or private) **(2)**
- MUE 311 - Piano Pedagogy I **(2)**
- MUE 411 - Piano Pedagogy II **(2)**
- MUH 311 - Piano Literature **(3)**
- MUH 333 - Music History and Literature III **(2)**
- MUP 339 - Small Ensemble **(1/2) 2 Units required**
- *One-unit Ensembles* **(4)**
- Upper-division Theory **(6)**
- Music Electives **(10)**

Total: 47 Units

# Vocal Performance, Bachelor of Music

## Program Learning Outcomes

*Students who complete the program in Vocal Performance will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

## Core Curriculum

*(Required of all Music majors)*

### Applied:

- MUA 101 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 201 - Piano Proficiency Exam **(0)**
- MUA 212 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 331 - Music History and Literature I **(2)**
- MUH 332 - Music History and Literature II **(2)**
- MUH 334 - World Music **(2)**
- MUH 431 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 120 - Music Theory I **(4)**
- MUT 121 - Music Theory II **(4)**
- MUT 220 - Music Theory III **(3)**

Total: 31 Units

## Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 101 - Recital Attendance - 4 semesters **(0)**
- MUA 250 - Diction for Singers I **(1)**
- MUA 251 - Diction for Singers II **(1)**
- MUA 255 - Voice **(4)**
- MUA 355 - Voice **(4)**
- MUA 455 - Voice **(4)**
- MUA 312 - Choral Conducting and Literature **(2)**
- MUA 376 - Junior Recital **(0)**
- MUA 476 - Senior Recital **(0)**
- MUE 310 - Vocal Pedagogy **(2)**
- MUE 451 - Internship in Music **(2)**
- MUH 309 - Vocal Literature I **(2)**
- MUH 310 - Vocal Literature II **(2)**
- MUH 333 - Music History and Literature III **(2)**
- *Upper-division Theory* **(6)**
- *One-unit Ensembles* **(4)**
- *Music Electives* **(8)**

Three units from:

- MUA 331 - Acting for Singers **(1)**
- MUA 332 - Musical Theatre Production **(1-2)**

Total: Units 47

Note(s):

Vocal Performance majors must complete their General Education language requirement in French or German. Approved transfer courses in Italian will also fulfill this requirement.

## Minor

### Music Minor

#### Requirements

- MUH 101 - Introduction to Listening (GE) **(2)**
- MUT 120 - Music Theory I **(4)**
- *Applied study in instrument or voice* **(2)**
- *One-unit Ensembles* **(2)**
- *Additional upper-division units in Music* **(8)**
- MUH 333 - Music History and Literature III **(2)**
- OR
- MUH 334 - World Music **(2)**

Total: 21 Units

# College of Natural and Social Sciences

## Administration

Dean of the Colleges: James G. Daichendt, Ed.D  
Office: Bond Academic Center, Deans' Suite  
Telephone: (619) 849-2706  
Fax: (619) 849-7018  
Email: gdaichen@pointloma.edu  
Administrative Assistant: Kami Leone

## General Information

The College of Natural and Social Sciences centers on areas of study at Point Loma Nazarene University that focus on preparation in the natural and social sciences. Programs in the natural and social sciences are offered through eight academic departments. Course offerings in the natural and social sciences are designed to help students explore a wide range of people-related, theoretical, and practical knowledge and skills. The college's highly qualified faculty members are professionally active and committed to engaging students in the learning experience. By emphasizing the university's mission to engage and challenge minds, to form and model character, and to see service as an expression of faith, the faculty challenge students to become life-long learners, to value the process of personal and intellectual development, and to give their lives in meaningful service to others.

## Credential and Internship Programs

Commission on Teacher Credentialing (CTC-approved) teaching credentials in Preliminary Level I: Multiple Subject, Single Subject, Educational Specialist: Mild/Moderate, Moderate/Severe, Clear Teaching Credential programs; Preliminary and Clear Administrative Services Credential; Pupil Personnel Services Credential; Internship programs. CLAD and Reading certificate programs.

## Centers

Point Loma Nazarene University maintains several centers within the organization of the College of Natural and Social Sciences, including:

- The Center for Justice and Reconciliation
- The Early Childhood Learning Center
- The Margaret Stevenson Center for Women's Studies

## Accreditations and Affiliations

Point Loma Nazarene University is accredited by the WASC Senior College and University Commission, the Association of Collegiate Business Schools and Programs (ACBSP), the Commission on Accreditation of Athletic Training Education (CAATE), the American Dietetic Association (ADA), the California Commission on Teacher Credentialing (CCTC), and the Commission on Collegiate Nursing Education (CCNE). **WASC may be contacted at 985 Atlantic Avenue, Suite 100, Alameda, CA 94501, or by telephone at 510-748-9001.**

## Academic Organization

The College of Natural and Social Sciences, under the direction of the dean of the College, functions with the supervision of academic departments, schools, and centers. The following is a list of chairs, directors, and deans in the college.

## Departments and Schools

**Department of Biology** - Dawne Page, chair

**Department of Chemistry** - Sara Chuong, chair

**Department of Mathematics, Information, and Computer Sciences** - Maria Zack, chair

**Department of Kinesiology** - Brandon Sawyer, co-chair; Jeffrey Sullivan, co-chair

**Department of Physics and Engineering** - Paul D. Schmelzenbach, chair

**Department of Psychology** - Ross Oakes-Mueller, chair

**Department of Sociology, Social Work, and Family Sciences** - Susan DeCristofaro Rogers, co-chair; Kevin Modesto, co-chair

## Regional Centers

**Bakersfield** - Jill Hamilton-Bunch, associate dean

**Mission Valley** - Deb Erickson, director

## Centers and Institutes

**The Center for Justice and Reconciliation** - James F. Gates, director

**The Early Childhood Learning Center** - Susan D. Rogers, academic director

**The Margaret Stevenson Center for Women's Studies** - Linda M. Beal, director

## Curricula

Students should refer to the following pages in this Catalog for a complete listing of program characteristics, degree requirements, and descriptions of courses offered by academic areas within the College of Natural and Social Sciences.

## College of Natural and Social Sciences

### Department of Biology

#### Programs

- • Biology, B.A.
- • Biology, B.S.
- • Biology-Chemistry, B.S. (Biology)
- • Biology: Cell and Molecular Biology Minor
- • Biology: Environmental Biology Minor
- • Biology: Organismal Biology Minor
- • Computational Science Minor - Biology/Environmental Science (Biology)
- • Computational Science Minor - Biology/Genetics (Biology)
- • Environmental Science (Biology), B.S.
- • Science-Business Minor (Science Majors - Biology Department)
- • Science-Marketing Minor (Science Majors - Biology Department)

## Department of Chemistry

### Programs

- • Biology-Chemistry, B.S. (Chemistry)
- • Chemistry, B.S.
- • Computational Science Minor - Chemistry (Chemistry)
- • Environmental Science (Chemistry), B.S.
- • Science-Business Minor (Science Majors - Chemistry Department)
- • Science-Marketing Minor (Science Majors - Chemistry Department)

## Department of Kinesiology

### Programs

- • Applied Health Science, B.S.
- • Athletic Coaching Minor
- • Athletic Training, B.A.
- • Exercise and Sport Science, B.A.

## Department of Mathematical, Information, and Computer Sciences

### Programs

- • Computational Science Minor - Biology/Environmental Science (Mathematics and Computer Science)
- • Computational Science Minor - Biology/Genetics (Mathematics and Computer Science)
- • Computational Science Minor - Chemistry (Mathematics and Computer Science)
- • Computational Science Minor - Physics (Mathematics and Computer Science)
- • Computational Science Minor - Psychology (Mathematics and Computer Science)
- • Computer Science Minor
- • Computer Science: Software Engineering, B.A.
- • Computer Science: Software Engineering, B.S.
- • Computer Science: Technical Applications, B.S.
- • Computer Technology - Business Minor (Math and Computer Science Majors)
- • Computer Technology - Marketing Minor (Math and Computer Science Majors)
- • Information Systems (Mathematical, Information, and Computer Science), B.S.
- • Mathematics Minor
- • Mathematics, B.A.
- • Mathematics, B.S.
- • Software Engineering Certificate
- • Software Engineering Minor

## Department of Physics and Engineering

### Programs

- • Computational Science Minor - Physics (Physics and Engineering)
- • Engineering Physics, B.S.
- • Physics Minor
- • Physics, B.A.
- • Physics, B.S.

## Department of Psychology

### Programs

- • Computational Science Minor - Psychology (Psychology)
- • Pre-Therapeutic Psychology Minor
- • Psychology, B.A.

## Department of Sociology, Social Work, and Family Sciences

### Programs

- • Child and Adolescent Development, B.A.
- • Child Development Minor
- • Criminal Justice Minor
- • Dietetics, B.S.
- • Nutrition and Food, B.A.
- • Nutrition Minor
- • Social Work, B.A.
- • Sociology Minor
- • Sociology, B.A.

## Department of Biology

### Purposes

The objectives of the Biology department coincide with the Point Loma Nazarene University mission summarized in the phrase: *To Teach, To Shape, To Send*.

**To Teach:** The department's commitment is to provide students the opportunity to build a broad foundation in the major disciplines of Biology, in the process of science skills, and in the critical thinking/quantitative skills that are required to apply their education to real world settings.

**To Shape:** In addition to the formal academic interactions, each student has opportunities to enter into mentoring relationships with department faculty through advising, lab assisting, research experiences, and departmental social functions. In these contexts, students can expect to dialogue about issues relating to their own personal and professional goals, the interface between the field of biology and society, and the relationship between faith and science.

**To Send:** The graduates of the Biology department will be able to apply both their faith and education in biology-related professions such as medicine, allied health fields, education, or industry. They will feel confident that they have been well prepared to contribute in a positive way in these fields, and society in general.

## Tradition of Excellence

The Department of Biology is dedicated to the success of the students, and offers a wealth of opportunities for students who are interested in pursuing work in science related fields. For students whose interests and academic needs lie in both biology and chemistry, an interdepartmental major in Biology-Chemistry has been designed to prepare students for biochemistry, immunology, molecular biology, pharmacology, physiology, medicine, and dentistry. Biology students have the opportunity to work side-by-side with professors doing faculty-assisted research projects, and may become co-authors on scholarly papers in national and international scientific journals. Many students present research at various science conferences. Students also have access to sophisticated instrumentation and computational resources for use in science courses and research labs.

All of these opportunities have been given to students through the help of numerous grants from governmental agencies such as the National Institutes of Health and the National Science Foundation, various private organizations including the Howard Hughes Medical Institute, cooperation from university administration, and strong financial backing by Biology and Chemistry alumni. Since 1977, alumni of the Department of Biology have contributed an average of more than \$12,000 per year in support of science instruction and research programs. Students who graduate with a degree from the Department of Biology leave PLNU prepared for graduate schools or careers in industry. Over the last 25 years, approximately 80 percent of PLNU's applicants have gained acceptance to medical schools (roughly twice the national average); the acceptance rate for Biology and Chemistry students applying to graduate (M.A., M.S., and Ph.D.) and dental school programs is over 95 percent.

## Au Sable Environmental Field Studies Program

Summer field courses in environmental biology offered by the Au Sable Institute of Environmental Studies, a Christian organization offering work and field experiences in the context of Christian environmental stewardship. Courses are offered during two 5-week summer sessions at two North American campuses (Great Lakes and Pacific Rim). Courses are at the upper-division level, and provide students academic content, field experience, and tools for stewardship of creation resources. Academic credit for all Au Sable courses is through PLNU. Courses are four units each, and a two-course load is typical. Course credit counts as a graduation elective. Qualified students are awarded the Au Sable Fellowship, and grants-in-aid of at least \$600 are also available. Interested students should contact PLNU's Sable Institute representative in the Biology department.

## Faculty

Dianne L. Anderson, Ph.D.  
*University of California, San Diego and San Diego State University*

Walter W. Cho, Ph.D.  
*Massachusetts Institute of Technology and Woods Hole Oceanographic Institution*

David E. Cummings, Ph.D.  
*University of Idaho*

Michael I. Dorrell, Ph.D.  
*The Scripps Research Institute, La Jolla, California*

Robert C. Elson, Ph.D.  
*University of Cambridge, England*

Rebecca J. Flietstra, Ph.D.  
*University of Kansas Medical Center*

Kristopher J. Koudelka, Ph.D.  
*The Scripps Research Institute, La Jolla, California*

Jennifer E. Lineback, Ph.D.  
*University of California, San Diego and San Diego State University*

April C. Maskiewicz Cordero, Ph.D.  
*University of California, San Diego and San Diego State University*

Michael S. Mooring, Ph.D.  
*University of California, Davis*

Dawne M. Page, Ph.D., Chair  
*University of California, San Francisco*

Brandon J. Sawyer, Ph.D.  
*Arizona State University*

## **Major**

### **Biology, B.A.**

#### **Program Learning Outcomes**

**Students who complete the B.A. program in Biology will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2. Participate in the life of the Biology Department by involvement in one or more of the following areas: research, biology clubs, and/or various positions of responsibility serving as graders, tutors, and/or teaching assistants.
3. Develop a rationally defensible integration of science and faith.
4. Be prepared for post-graduate studies or science-related careers.

#### **Lower-Division Requirements**

- BIO 210 - Cell Biology and Biochemistry (GE) **(4)** \*\*
- BIO 211 - Ecological and Evolutionary Systems (GE) **(4)** \*\*
- BIO 212 - Organismal Biology **(3)**
- CHE 151 - General Chemistry Tutorial **(1)** \*
- CHE 152 - General Chemistry I (GE) **(4)** \*\*
- CHE 153 - General Chemistry II **(4)**
- CHE 294 - Organic Chemistry I **(4)**
- MTH 144 - Calculus With Applications (GE) **(4)** \*\*

**Total: 27-28 Units**

**Note(s):**

*\*Course can be waived.*

## Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 352 - Research Methodology (2)
- BIO 363 - Conservation Ecology (3)
- BIO 380 - Molecular Biology (3)
- BIO 497 - Biology Seminar (1)
- MTH 363 - Calculus Based Statistics With R (3)

Upper Division Total: 16 Units

Take a minimum of 12 units of electives from the following options:

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 350 - Advanced Cell Biology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 450 - Advanced Biochemistry (4)
- BIO 470 - Neuroscience (3)
- BIO 473 - Experimental Marine Ecology (3)
- BIO 490 - Internship in Biology (1-3)

Upper Division Elective Total: 12 Units

Bachelor of Arts Total: 55-56 Units\*\*

\*\* 12 units meet general education requirements

## **Biology, B.S.**

### Program Learning Outcomes

**Students who complete the B.S. program in Biology will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2. Participate in the life of the Biology Department by involvement in one or more of the following areas: research, biology clubs, and/or various positions of responsibility serving as graders, tutors, and/or teaching assistants.
3. Develop a rationally defensible integration of science and faith.
4. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) **(4)** \*\*
- BIO 211 - Ecological and Evolutionary Systems (GE) **(4)** \*\*
- BIO 212 - Organismal Biology **(3)**
- CHE 151 - General Chemistry Tutorial **(1)** \*
- CHE 152 - General Chemistry I (GE) **(4)** \*\*
- CHE 153 - General Chemistry II **(4)**
- CHE 294 - Organic Chemistry I **(4)**
- MTH 144 - Calculus With Applications (GE) **(4)** \*\*
- PHY 141 - General Physics I (GE) **(4)** \*\*
- PHY 142 - General Physics II (GE) **(4)**

Total: 35-36 Units

Note(s):

*\*Course can be waived.*

## Upper-Division Requirements

- BIO 345 - Genetics **(4)**
- BIO 352 - Research Methodology **(2)**
- BIO 363 - Conservation Ecology **(3)**
- BIO 380 - Molecular Biology **(3)**
- BIO 497 - Biology Seminar **(1)**
- MTH 363 - Calculus Based Statistics With R **(3)**

Upper Division Total: 16 Units

Take a minimum of 14 units of electives from the following options:

- BIO 312 - Applied Plant Biology **(2)**
- BIO 315 - Microbiology **(3)**
- BIO 323 - Introduction to Oceanography **(3)**
- BIO 325 - Insect Biology **(3)**
- BIO 333 - Marine Biology **(3)**
- BIO 340 - Field Biology: Neotropical Ecology **(2)**

- BIO 350 - Advanced Cell Biology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 450 - Advanced Biochemistry (4)
- BIO 470 - Neuroscience (3)
- BIO 473 - Experimental Marine Ecology (3)
  
- BIO 490 - Internship in Biology (1-3)  
OR
- BIO 499 - Research in Biology (1-3)
  
- **Approved Off-Campus (1-4)**

Upper Division Elective Total: 14 Units

Bachelor of Science Total: 65-66 Units \*\*

\*\* 12 units meet general education requirements.

## **Biology-Chemistry, B.S. (Biology)**

The interdepartmental major in Biology-Chemistry is designed for students whose academic needs and interests include both biology and chemistry. A large segment of contemporary scientific investigation lies at the intersection of these two fields. Areas open to students by this preparation include medicine, dentistry, and graduate disciplines such as biochemistry, physiology, and molecular biology.

### Program Learning Outcomes

**Students who complete the program in Biology-Chemistry will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations.
4. Participate in the life of the Biology and/or Chemistry Department by involvement in one or more of the following areas: research, biology and/or chemistry clubs, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
5. Develop a rationally defensible integration of science and faith.
6. Be prepared for post-graduate studies or science-related careers.

### Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4)

Choose one sequence: 8 Units

- PHY 141 - General Physics I (GE) (4) **AND**
- PHY 142 - General Physics II (GE) (4)
- OR**
- PHY 241 - University Physics I (GE) (4) **AND**
- PHY 242 - University Physics II (4)

Total: 38-39 Units

Note(s):

*\*Course can be waived*

### Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 380 - Molecular Biology (3)
- BIO 497 - Biology Seminar (1)
- CHE 304 - Organic Chemistry II (4)
- CHE 325 - Physical Chemistry I (4)
- CHE 466 - Bioinorganic Chemistry (2)
- BIO 450 - Advanced Biochemistry (4) **OR**
- CHE 450 - Advanced Biochemistry (4)

One course from:

- CHE 326 - Physical Chemistry II (3)
- CHE 351 - Organic Structure Elucidation (2)
- CHE 370 - Instrumental Analysis (2)
- CHE 453 - Advanced Organic Chemistry (2)
- CHE 468 - Advanced Inorganic Chemistry (3)

At least five units from:

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)

- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 350 - Advanced Cell Biology (3)
- BIO 352 - Research Methodology (2)
- BIO 363 - Conservation Ecology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 470 - Neuroscience (3)
- BIO 473 - Experimental Marine Ecology (3)

Total: 29-31 Units

Bachelor of Science Total: 67-70 Units

## **Environmental Science (Biology), B.S.**

The interdepartmental major in Environmental Science is designed to prepare students to monitor the quality of the environment, interpret the impact of human actions on terrestrial and aquatic ecosystems, and develop strategies for ecosystem restoration. Career opportunities in this field include conservation biology, environmental analysis, wildlife biology, environmental education, ecological research, environmental planning, resource management, and environmental chemistry.

### Program Learning Outcomes

**Students who complete the program in Environmental Science will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological.
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.
5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6. Be prepared for post-graduate studies or science-related careers.

### Lower-Division Requirements

- BIO 102 - Environment and People (GE) (4) \*\*
- BIO 210 - Cell Biology and Biochemistry (GE) (4) \*\*
- BIO 211 - Ecological and Evolutionary Systems (GE) (4) \*\*
- BIO 212 - Organismal Biology (3)

- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4) \*\*
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4) \*\*

Choose one sequence: 8 Units

- PHY 141 - General Physics I (GE) (4) \*\*
- PHY 142 - General Physics II (GE) (4)
  
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

Choose one of three: 3 Units

- ECO 101 - Principles of Macroeconomics (GE) (3) \*\*
- ECO 102 - Principles of Microeconomics (GE) (3) \*\*
- SOC 201 - Cultural Anthropology (GE) (3) \*\*

Total: 45-46 Units

Note(s):

*\*Course can be waived*

### Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 363 - Conservation Ecology (3)
- BIO 497 - Biology Seminar (1)
- CHE 370 - Instrumental Analysis (2)
- MTH 363 - Calculus Based Statistics With R (3)

Total: 13 Units

### Upper-Division Electives (14 units minimum)

*Of the 14 required upper division electives, a minimum of 8 units of upper-division electives are required from approved environmental off-campus programs. Both departmental chairs (Biology and Chemistry) or their designees are responsible for approving all off-campus courses. At least one-half of upper-division units in the major must be taken at PLNU.*

*The following courses can be used to transfer in these 8 units:*

- EVS 396 - Advanced Biology (3)
- EVS 397 - Advanced Ecology (3)
- EVS 398 - Advanced Ecological Applications (3)
- EVS 399 - Public Policy and Stewardship (3)

### Advanced Science Electives (8 units minimum)

*One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 473 - Experimental Marine Ecology (3)
- BIO 450 - Advanced Biochemistry (4) **OR**
- CHE 450 - Advanced Biochemistry (4)
- CHE 304 - Organic Chemistry II (4)
- CHE 325 - Physical Chemistry I (4)
- CHE 351 - Organic Structure Elucidation (2)
- CHE 466 - Bioinorganic Chemistry (2)
- CHE 468 - Advanced Inorganic Chemistry (3)

### Other Related Electives (6 units minimum)

*Students can customize their degree by taking one course from each of the two categories below. One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

#### Methodology:

- BIO 352 - Research Methodology (2)
- BIO 490 - Internship in Biology (1-3)
- BIO 499 - Research in Biology (1-3)
- CHE 490 - Internship in Chemistry (1-3)
- CHE 499 - Research in Chemistry (1-2)

#### Public Policy and Stewardship:

- PHL 360 - Philosophy and the Sciences (3)
- POL 435 - Global Governance (4)
- POL 441 - Issues in Public Policy (4)

Upper-Division Total: 27 Units

Bachelor of Science Total: 72 - 73 Units \*\*

*\*\*15 units meet general education requirements.*

## **Minor**

### **Biology: Cell and Molecular Biology Minor**

#### Required

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- BIO 345 - Genetics (4)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4)

Nine units from the following electives:

- BIO 315 - Microbiology (3)
- BIO 350 - Advanced Cell Biology (3)
- BIO 352 - Research Methodology (2)
- BIO 380 - Molecular Biology (3)
- BIO 390 - Immunology (3)
- BIO 400 - Developmental Biology (3)
- BIO 423 - Advanced Human Physiology (3)

Note(s):

*\*Course can be waived.*

Total: 25 Units

### **Biology: Environmental Biology Minor**

#### Required

- BIO 102 - Environment and People (GE) (4)
  - BIO 211 - Ecological and Evolutionary Systems (GE) (4)
  - CHE 101 - Chemistry and Society (GE) (4)  
OR
  - CHE 151 - General Chemistry Tutorial (1) \*
- AND**

- CHE 152 - General Chemistry I (GE) (4)

Lower Division Total: 12-13 Units

Note(s):

*\*Course can be waived.*

### Upper-Division Requirements

- BIO 363 - Conservation Ecology (3)

Choose 5 units of Approved Electives from the following:

- BIO 312 - Applied Plant Biology (2)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 430 - Animal Behavior (3)
- BIO 473 - Experimental Marine Ecology (3)

### Off-Campus Requirement

- **One approved off-campus field-immersion course (4)**

Upper Division Total: 12 Units

Total for Minor: 24-25 Units

## **Biology: Organismal Biology Minor**

### Required

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- BIO 212 - Organismal Biology (3)
- BIO 363 - Conservation Ecology (3)

Nine units from the following electives:

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)

- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 473 - Experimental Marine Ecology (3)

Total: 23 Units

## Computational Science Minor - Biology/Environmental Science (Biology)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

## Courses for Biology/Environmental Science Emphasis

### Lower-Division Requirements

- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- CSC 143 - Introduction to Computer Programming (3)

### Upper-Division Requirements

- BIO 363 - Conservation Ecology (3)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- 
- **PROJECT:** *(Choose At Least 3 Units)*
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

## Biology Major - Required Courses

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

### **Minor Total for Biology Majors: 25**

### **Computer Science Majors - Required Courses**

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
- 
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

### **Minor Total for Computer Science Majors: 27**

### **Mathematics Majors - Required Courses**

- MTH 164 - Calculus I (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

### **Minor Total for Mathematics Majors: 25**

### **Computational Science Minor - Biology/Genetics (Biology)**

### **Core Courses for Biology/Genetics Emphasis**

#### **Lower-Division Requirements**

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- CSC 143 - Introduction to Computer Programming (3)

#### **Upper-Division Requirements**

- BIO 345 - Genetics (4)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
-

- **PROJECT:** *(Choose at least 3 units)*
- 
- HON 498 - Honors Project I **(2) and**
- HON 499 - Honors Project II **(1)**
- OR
- MTH 495 - Service Learning in Mathematics **(3)**
- OR
- CSC 495 - Service Learning in Computer Science **(3)**

### **Biology Major - Required Courses**

- MTH 144 - Calculus With Applications (GE) **(4)**
- CSC 322 - Data Management for Computational Science **(2)**
- MTH 363 - Calculus Based Statistics With R **(3)**

### **Minor Total for Biology Majors: 26**

### **Computer Science Majors - Required Courses**

- MTH 164 - Calculus I (GE) **(4)**
- ISS 414 - Data Base Systems and Web Integration **(4)**
- MTH 383 - Mathematical Probability and Statistics **(3)**

### **Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- MTH 164 - Calculus I (GE) **(4)**
- CSC 322 - Data Management for Computational Science **(2)**
- MTH 383 - Mathematical Probability and Statistics **(3)**

### **Minor Total for Mathematics Majors: 26**

### **Science-Business Minor (Science Majors - Biology Department)**

Science-Business Minor for Biology, Chemistry and Environmental (Science majors)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with business knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

- ACC 200 - Principles of Accounting for Non-Business Majors **(3)**

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 345 - Genetics (4)
- CHE 294 - Organic Chemistry I (4)
- MGT 212 - Principles of Management (3)
- MKT 332 - Principles of Marketing (3)
- MTH 144 - Calculus With Applications (GE) (4)  
OR
- MTH 164 - Calculus I (GE) (4)

Select one course from:

- BUS 475 - Sustainability in Action (3)
  - MGT 320 - Organizational Behavior (3)
  - MGT 374 - Human Resource Management (3)
  - MGT 382 - Applied Entrepreneurship (3)
  - MGT 412 - Leadership Theory and Practice (3)
  - MGT 416 - Perspectives on Leadership (3)
  - MGT 470 - Nonprofit Organization Management (3)
  - MGT 484 - Operations Management (3)
- Plus one elective from BIO or CHE 300-499 for three (3) units.**

31 total units

## Science-Marketing Minor (Science Majors - Biology Department)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with marketing knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

### Science-Marketing Minor for Biology, Chemistry, and Environmental Science Majors

- ACC 200 - Principles of Accounting for Non-Business Majors (3)  
The ACC201 and ACC202 sequence may be substituted for ACC200.
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 345 - Genetics (4)
- MKT 332 - Principles of Marketing (3)

**Choose one (1) Mathematics course:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)

**Select two (2) courses from the following Marketing courses:**

- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)

Total Minor: 37 units

## Department of Chemistry

### Purposes

- To prepare students for entrance into graduate school and eventually for professional work in chemistry or related fields;
- To prepare students, who don't wish to attend graduate school, to enter the field of industrial chemistry immediately after graduation;
- To prepare students to teach chemistry or physical science at the secondary education level;
- To provide students with the opportunity to participate as partners with their professors in nationally reported research projects;
- To provide students with a general knowledge of chemistry and its relation to society.

### Tradition of Excellence

The strength and reputation of the Chemistry program has been well established over the past five decades. Quality classroom instruction coupled with personal contact with caring faculty lays the foundation for students' success. Small classes and deliberate faculty mentoring provide students the knowledge and confidence to pursue their career goals. At PLNU, the faculty understand that chemistry is a laboratory science, and almost all courses in the major have a significant laboratory component. Students become very familiar with the instrumental tools of modern chemical investigation.

Undergraduate research has, and continues to be, the hallmark of the Chemistry department. Hundreds of students have had the opportunity to work side by side with university faculty in the summer research programs. Results of these studies are published in peer-reviewed professional journals with students included as co-authors. Over 150 such articles have been published since 1965 as part of the Chemistry department undergraduate research program. Most importantly, students learn to think like scientists as they tackle their own research project. Undergraduate research requires funding and the Chemistry faculty has been very successful in competing for public and private grants (the total exceeds \$2 million). As remarkable evidence of loyalty and support, Department alumni also contribute nearly \$40,000 annually to partially fund the kind of research from which they themselves benefited. Students, faculty, and alumni connect in significant ways to make chemistry education at PLNU a respected and vital experience.

### Career Opportunities

The professional success of graduates in the Department of Chemistry attests to the quality of the program. More than 90 percent of students who have applied to health profession schools (medical, dental, optometry, pharmacy, and veterinary) were accepted. Higher percentages are accepted into Ph.D. programs in Chemistry and related fields. PLNU alumni can be found on the faculty of numerous medical schools and universities. They are also making important contributions in the practice of medicine, in school classrooms and industrial labs. The same quality undergraduate education is available to all students, and the department is proud of each of our graduates.

### Faculty

Laurance Beauvais, Ph.D.  
*University of California, Berkeley*

Sara Choung, Ph.D., Co-Chair  
*University of California, Berkeley*

Ariane Jansma, Ph.D.  
*University of California, San Diego*

Katherine Maloney, Ph.D.  
*Cornell University*

Marc Perry, Ph.D.  
*New Mexico State University*

Matthieu Rouffet, Ph.D., Co-Chair  
*School of Pharmacy, Reims, France*

Lane Votapka, Ph.D.  
*University of California, San Diego*

## **Major**

### **Biology-Chemistry, B.S. (Chemistry)**

The interdepartmental major in Biology-Chemistry is designed for students whose academic needs and interests include both biology and chemistry. A large segment of contemporary scientific investigation lies at the intersection of these two fields. Areas open to students by this preparation include medicine, dentistry, and graduate disciplines such as biochemistry, physiology, and molecular biology.

## **Program Learning Outcomes**

**Students who complete the program in Biology-Chemistry will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations.
4. Participate in the life of the Biology and/or Chemistry Department by involvement in one or more of the following areas: research, biology and/or chemistry clubs, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
5. Develop a rationally defensible integration of science and faith.
6. Be prepared for post-graduate studies or science-related careers.

## **Lower-Division Requirements**

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4)

Choose one sequence: 8 Units

- PHY 141 - General Physics I (GE) **(4) AND**
- PHY 142 - General Physics II (GE) **(4)**
- OR**
- PHY 241 - University Physics I (GE) **(4) AND**
- PHY 242 - University Physics II **(4)**

Total: 38-39 Units

Note(s):

*\*Course can be waived*

### Upper-Division Requirements

- BIO 345 - Genetics **(4)**
- BIO 380 - Molecular Biology **(3)**
- BIO 497 - Biology Seminar **(1)**
- CHE 304 - Organic Chemistry II **(4)**
- CHE 325 - Physical Chemistry I **(4)**
- CHE 466 - Bioinorganic Chemistry **(2)**
  
- BIO 450 - Advanced Biochemistry **(4) OR**
- CHE 450 - Advanced Biochemistry **(4)**

One course from:

- CHE 326 - Physical Chemistry II **(3)**
- CHE 351 - Organic Structure Elucidation **(2)**
- CHE 370 - Instrumental Analysis **(2)**
- CHE 453 - Advanced Organic Chemistry **(2)**
- CHE 468 - Advanced Inorganic Chemistry **(3)**

At least five units from:

- BIO 312 - Applied Plant Biology **(2)**
- BIO 315 - Microbiology **(3)**
- BIO 323 - Introduction to Oceanography **(3)**
- BIO 325 - Insect Biology **(3)**
- BIO 333 - Marine Biology **(3)**
- BIO 340 - Field Biology: Neotropical Ecology **(2)**
- BIO 350 - Advanced Cell Biology **(3)**
- BIO 352 - Research Methodology **(2)**
- BIO 363 - Conservation Ecology **(3)**
- BIO 390 - Immunology **(3)**

- BIO 400 - Developmental Biology (3)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 470 - Neuroscience (3)
- BIO 473 - Experimental Marine Ecology (3)

Total: 29-31 Units

Bachelor of Science Total: 67-70 Units

## Chemistry, B.S.

### Program Learning Outcomes

**Students who complete the program in Chemistry will be able to:**

1. Apply key concepts and principles in analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry.
2. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations and analyses.
3. Participate in the life of the Chemistry Department by involvement in one or more of the following areas: research, chemistry club, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
4. Be prepared for post graduate studies or a science-related career.

### Lower-Division Requirements

- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
  
- MTH 144 - Calculus With Applications (GE) (4)
- OR**
- MTH 164 - Calculus I (GE) (4)
  
- MTH 174 - Calculus II (4)
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

Total: 31-32 Units

Note(s):

*\*Course can be waived*

## Upper-Division Requirements

- CHE 304 - Organic Chemistry II (4)
- CHE 325 - Physical Chemistry I (4)
- CHE 326 - Physical Chemistry II (3)
- CHE 327 - Physical Chemistry II Laboratory (1)
- CHE 351 - Organic Structure Elucidation (2)
- CHE 370 - Instrumental Analysis (2)
- CHE 450 - Advanced Biochemistry (4)
- CHE 453 - Advanced Organic Chemistry (2)
- CHE 454 - Advanced Organic Chemistry Laboratory (1)
- CHE 466 - Bioinorganic Chemistry (2)
- CHE 467 - Advanced Inorganic Chemistry Laboratory (1)
- CHE 468 - Advanced Inorganic Chemistry (3)
- CHE 495 - Chemistry Seminar (1)
- *Science and/or Math electives beyond those required for the degree must be approved by the department chair (Biology and Physics 300 level or higher, Math 200 level or higher). (4)*

Total: 34 Units

## Recommended

- CHE 499 - Research in Chemistry (1-2)
- MTH 233 - Linear Algebra (3)
- MTH 274 - Calculus III (4)

Bachelor of Science Total: 65-66 Units

## Environmental Science (Chemistry), B.S.

The interdepartmental major in Environmental Science is designed to prepare students to monitor the quality of the environment, interpret the impact of human actions on terrestrial and aquatic ecosystems, and develop strategies for ecosystem restoration. Career opportunities in this field include conservation biology, environmental analysis, wildlife biology, environmental education, ecological research, environmental planning, resource management, and environmental chemistry.

## Program Learning Outcomes

**Students who complete the program in Environmental Science will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological.
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.

5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 102 - Environment and People (GE) (4) \*\*
- BIO 210 - Cell Biology and Biochemistry (GE) (4) \*\*
- BIO 211 - Ecological and Evolutionary Systems (GE) (4) \*\*
- BIO 212 - Organismal Biology (3)
- CHE 151 - General Chemistry Tutorial (1) \*
- CHE 152 - General Chemistry I (GE) (4) \*\*
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MTH 144 - Calculus With Applications (GE) (4) \*\*

### Choose one sequence: 8 Units

- PHY 141 - General Physics I (GE) (4) \*\*
- PHY 142 - General Physics II (GE) (4)
  
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

### Choose one of three: 3 Units

- ECO 101 - Principles of Macroeconomics (GE) (3) \*\*
- ECO 102 - Principles of Microeconomics (GE) (3) \*\*
- SOC 201 - Cultural Anthropology (GE) (3) \*\*

Total: 45-46 Units

Note(s):

*\*Course can be waived*

## Upper-Division Requirements

- BIO 345 - Genetics (4)
- BIO 363 - Conservation Ecology (3)
- BIO 497 - Biology Seminar (1)
- CHE 370 - Instrumental Analysis (2)
- MTH 363 - Calculus Based Statistics With R (3)

Total: 13 Units

## Upper-Division Electives (14 units minimum)

*Of the 14 required upper division electives, a minimum of 8 units of upper-division electives are required from approved environmental off-campus programs. Both departmental chairs (Biology and Chemistry) or their designees are responsible for approving all off-campus courses. At least one-half of upper-division units in the major must be taken at PLNU.*

*The following courses can be used to transfer in these 8 units:*

- EVS 396 - Advanced Biology (3)
- EVS 397 - Advanced Ecology (3)
- EVS 398 - Advanced Ecological Applications (3)
- EVS 399 - Public Policy and Stewardship (3)

## Advanced Science Electives (8 units minimum)

*One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)
- BIO 473 - Experimental Marine Ecology (3)
  
- BIO 450 - Advanced Biochemistry (4) **OR**
- CHE 450 - Advanced Biochemistry (4)
  
- CHE 304 - Organic Chemistry II (4)
- CHE 325 - Physical Chemistry I (4)
- CHE 351 - Organic Structure Elucidation (2)
- CHE 466 - Bioinorganic Chemistry (2)
- CHE 468 - Advanced Inorganic Chemistry (3)

## Other Related Electives (6 units minimum)

*Students can customize their degree by taking one course from each of the two categories below. One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

### Methodology:

- BIO 352 - Research Methodology (2)
- BIO 490 - Internship in Biology (1-3)

- BIO 499 - Research in Biology (1-3)
- CHE 490 - Internship in Chemistry (1-3)
- CHE 499 - Research in Chemistry (1-2)

#### Public Policy and Stewardship:

- PHL 360 - Philosophy and the Sciences (3)
- POL 435 - Global Governance (4)
- POL 441 - Issues in Public Policy (4)

Upper-Division Total: 27 Units

Bachelor of Science Total: 72 - 73 Units \*\*

\*\*15 units meet general education requirements.

### Minor

#### Computational Science Minor - Chemistry (Chemistry)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

### Core Courses for Chemistry Emphasis

#### Lower-Division Requirements

- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CSC 143 - Introduction to Computer Programming (3)
- MTH 164 - Calculus I (GE) (4)

#### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- 
- **Project:** (Choose at least 3 units)
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)

- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### **Chemistry Major - Required Courses**

- CHE 213 - Analytical Chemistry (3)
- CHE 325 - Physical Chemistry I (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)
- OR
- MTH 383 - Mathematical Probability and Statistics (3)

### **Minor Total for Chemistry Majors: 34**

### **Computer Science Majors - Required Courses**

- ISS 414 - Data Base Systems and Web Integration (4)
- 
- MTH 363 - Calculus Based Statistics With R (3) OR
- MTH 383 - Mathematical Probability and Statistics (3)

### **Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- CHE 213 - Analytical Chemistry (3)
- CHE 325 - Physical Chemistry I (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

### **Minor Total for Mathematics Majors: 34**

### **Science-Business Minor (Science Majors - Chemistry Department)**

Science-Business Minor for Biology, Chemistry and Environmental (Science majors)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with business knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

- ACC 200 - Principles of Accounting for Non-Business Majors (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 345 - Genetics (4)
- CHE 294 - Organic Chemistry I (4)
- MGT 212 - Principles of Management (3)
- MKT 332 - Principles of Marketing (3)
- MTH 144 - Calculus With Applications (GE) (4)  
OR
- MTH 164 - Calculus I (GE) (4)

Select one course from:

- BUS 475 - Sustainability in Action (3)
  - MGT 320 - Organizational Behavior (3)
  - MGT 374 - Human Resource Management (3)
  - MGT 382 - Applied Entrepreneurship (3)
  - MGT 412 - Leadership Theory and Practice (3)
  - MGT 416 - Perspectives on Leadership (3)
  - MGT 470 - Nonprofit Organization Management (3)
  - MGT 484 - Operations Management (3)
- Plus one elective from BIO or CHE 300-499 for three (3) units.**

31 total units

## Science-Marketing Minor (Science Majors - Chemistry Department)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with marketing knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

## Science-Marketing Minor for Biology, Chemistry, and Environmental Science Majors

- ACC 200 - Principles of Accounting for Non-Business Majors (3)  
The ACC201 and ACC202 sequence may be substituted for ACC200.
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 345 - Genetics (4)
- MKT 332 - Principles of Marketing (3)

**Choose one (1) Mathematics course:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)

**Select two (2) courses from the following Marketing courses:**

- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)

Total Minor: 37 units

## **Department of Kinesiology**

### **Purposes**

- To provide students the opportunity to participate in a program designed to aid in the development of physical efficiency, healthful living, social cooperation and individual activity for the enjoyable and intelligent use of leisure time;
- To introduce students to the potential benefits of a stimulating systematic exercise program;
- To prepare students for careers in teaching, coaching, therapeutic science, athletic training, and recreation-oriented community service programs.

### **Tradition of Excellence**

The Department of Kinesiology offers students many unique opportunities. Students participate with experienced and nationally recognized professors in a dynamic, hands-on educational experience. The faculty gives the students a deep insight into the area of sport and physical education, making the program perfect for a variety of interests. In addition, the Athletic Training Education Program (ATEP) is nationally accredited by the Commission on the Accreditation of Athletic Training Education Programs (CAATE). As part of the educational program, students participate in practical laboratory and internship programs, observation and participation in hospitals and physical therapy centers, observation of surgery and special lecture series with medical doctors and other medical experts.

### **Career Opportunities**

Graduates of the Department of Kinesiology are prepared for a variety of opportunities that await them after leaving PLNU. Many students go on to graduate schools in physical therapy, athletic training, physician assistant, exercise physiology and medical school. Other students become teachers and/or coaches. Still others go on to work as program directors at hospitals and sports clinics. With the experiences and education found at PLNU, the opportunities in fields related to Kinesiology become reality.

### **Faculty**

Brent Alvar, Ph.D.  
*Arizona State University*

Ted Anderson, Ph.D.  
*Texas A&M University*

Jerry L. Arvin, M.S.  
*Butler University*

Nicole L. Cosby, Ph.D.  
*University of Virginia*

Ann E. Davis, M.Ed.  
*National University*

Susan E. Ganz, Ph.D.  
*University of New Mexico*

Timothy M. Hall, Ed.D.  
*Alliant International University*

Richard M. Hills, M.A.  
*San Diego State University*

Leon M. Kugler, Ph.D.  
*University of Toledo*

Heidi Lynch, Ph.D.  
*Arizona State University*

Brandon J. Sawyer, Ph.D.  
*Arizona State University*

Jeff A. Sullivan, Ph.D., Chair  
*Oregon State University*

## **Major**

### **Applied Health Science, B.S.**

#### **Program Learning Outcomes**

*Students who complete the program in Applied Health Science will be able to:*

1. Demonstrate cognitive and psychomotor competence in the assessment of structure and function of the body including typical, anomalous, and pathological states.
2. Write technically in the context of the review and synthesis of professional literature.
3. Communicate orally to a target audience in topics of medicine and exercise science.
4. Conceptualize, exhibit, and teach from art they create, reflecting the structure and function of the human body and/or the implements manipulated by or acting upon the body.
5. Demonstrate ethical behavior, whether undergraduate students or alumni through volunteer or professional settings, and treat others as they wish to be treated as per the example of Jesus Christ.
6. Demonstrate preparation to articulate their post-graduate educational and career callings in light of their life purposes.

#### **Lower-Division Requirements**

- KIN 101 - Orientation to Kinesiology **(1)**
- KIN 280 - Introduction to Athletic Training **(2)**
- BIO 130 - Human Anatomy and Physiology I (GE) **(4)**
- BIO 140 - Human Anatomy and Physiology II **(4)**
- BIO 210 - Cell Biology and Biochemistry (GE) **(4)**
- BIO 220 - Microbiology of Infectious Diseases **(4)**
- CHE 152 - General Chemistry I (GE) **(4)**
- CHE 153 - General Chemistry II **(4)**
- PSY 103 - General Psychology (GE) **(3)**
- PED 200 - Optimal Health (GE) **(2)**
- *Certification in First Aid and CPR*

Total: 32 Units

## Upper-Division Requirements

- ATR 385 - Pathology of Injury and Illness (3)
- KIN 312 - Motor Learning and Motor Development (3)
- KIN 325 - Structural Kinesiology (2)
- KIN 327 - Applied Biomechanics (2)
- KIN 340 - Physiology of Exercise (3)
- PSY 321 - Abnormal Psychology (3)
  
- KIN 440 - Measurement, Statistics, and Evaluation of Human Performance (3) **OR**
- MTH 203 - Introduction to Statistics (3) \*

*\* Students are required to complete a minimum of 24 upper-division units in the major. If the lower division MTH203 option is chosen, at least 8 units from the electives sections below must be upper-division (300-400 level).*

Two additional upper-division electives in the Department of Kinesiology:

- ATR 387 - Assessment of Lower Extremity Pathology (3)
- ATR 388 - Assessment of Head, Spinal, and Upper Extremity Pathology (3)
- ATR 410 - Therapeutic Exercise (3)
- ATR 415 - Therapeutic Modalities and Pharmacology (3)
- KIN 430 - Clinical Exercise Physiology (3)
- KIN 475 - Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3)
- KIN 488 - Internship in Kinesiology (1-3) **3 Units Required**

Take a minimum of (7) units of electives from the following:

Take a minimum of (7) units of electives from the following:

- ATR 415 - Therapeutic Modalities and Pharmacology (3)
- ATR 420 - Pharmacology (1)
- BIO 345 - Genetics (4)
- BIO 470 - Neuroscience (3)
- CHE 294 - Organic Chemistry I (4)
- EXS 330 - Nutrition for Exercise and Sport Performance (3)
- EXS 350 - Fitness Assessment and Exercise Prescription (3)
- EXS 370 - Praxis of Strength Training and Conditioning (3)
- FCS 150 - Human Development (3)
- MTH 203 - Introduction to Statistics (3)
- PHY 141 - General Physics I (GE) (4)
- PHY 142 - General Physics II (GE) (4)
- PSY 308 - Developmental Psychology – Birth Through Adolescence (4)

Recommended Course

- KIN 340L - Physiology of Exercise Lab (1)

Total: 26-35 Units

## Total Units for Applied Health Science

**Total units for applied health science: 66-67**

## **Athletic Training, B.A.**

### Program Learning Outcomes

*Students who complete the program in Athletic Training will be able to:*

1. Demonstrate cognitive and psychomotor competence in the 12 content areas of the Athletic Training Educational Competencies.
2. Exhibit advancing clinical proficiency in the practice of athletic training through (1) development in knowledge, psychomotor skills, and clinical reasoning and (2) application of evidence-based decision making.
3. Speak and write coherently on information in athletic training, and communicate it effectively to a target audience.
4. Demonstrate the common values and behaviors of the athletic training profession in a distinctly moral and ethical manner, integrating the Christian faith with clinical practice.
5. Demonstrate preparation to serve a diverse environment through experience with a variety of patient populations and clinical settings and with various allied healthcare professionals.
6. Demonstrate knowledge and skills required of an entry-level Certified Athletic Trainer.
7. Demonstrate preparation for careers that utilize Certified Athletic Trainers or for graduate study and employment in allied healthcare professions.

### Lower-Division Requirements

- ATR 102 - Risk Management and Emergency Response (1)
- ATR 102L - Risk Management and Emergency Response Laboratory (1)
- ATR 290 - Clinical Internship I (3)
- ATR 291 - Clinical Internship II (3)
- KIN 101 - Orientation to Kinesiology (1)
- KIN 280 - Introduction to Athletic Training (2)
- KIN 280L - Introduction to Athletic Training Lab (1)
- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 140 - Human Anatomy and Physiology II (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **OR**
- CHE 152 - General Chemistry I (GE) (4)

Total: 24-25 Units

### Upper-Division Requirements

- ATR 385 - Pathology of Injury and Illness (3)
- ATR 387 - Assessment of Lower Extremity Pathology (3)
- ATR 388 - Assessment of Head, Spinal, and Upper Extremity Pathology (3)
- ATR 390 - Clinical Practicum I (3)
- ATR 391 - Clinical Practicum II (3)
- ATR 410 - Therapeutic Exercise (3)
- ATR 415 - Therapeutic Modalities and Pharmacology (3)
- ATR 420 - Pharmacology (1)
- ATR 460 - Management of Allied Health Care (3)
- ATR 493 - Clinical Preceptorship I (2)
- ATR 494 - Clinical Preceptorship II (1)
- KIN 312 - Motor Learning and Motor Development (3)
- KIN 325 - Structural Kinesiology (2)
- KIN 327 - Applied Biomechanics (2)
- KIN 340 - Physiology of Exercise (3)
  
- KIN 440 - Measurement, Statistics, and Evaluation of Human Performance (3) **OR**
- MTH 203 - Introduction to Statistics (3)

Total: 41 Units

## Recommended Courses

- PED 200 - Optimal Health (GE) (2)
- EXS 370 - Praxis of Strength Training and Conditioning (3)
- KIN 340L - Physiology of Exercise Lab (1)

## Accreditation of the Athletic Training Program

The ATP is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).

## Admission to the Athletic Training Program (ATP)

Students must apply for admission to the major. Space in the sophomore, junior and senior level courses is limited, and admission to the Athletic Training major is competitive. Selections for participation in the ATP are made during the spring for the following fall semester.

## Program Fees

### Cost of Immunizations

Students are responsible for the costs of their own immunizations, the currency of which must be documented and placed on file in the Program Director's office.

### Costs of Transportation

The student is responsible for transportation and the costs associated with that transportation to clinical affiliate sites which are utilized in the clinical courses. Students are encouraged to ride share and/or cost share.

## **Required Clinical Clothing**

Some required clinical clothing is provided for the ATS. In the spring semester decisions are made regarding the clothing required for the following fall semester. Students are notified as to the clothing that will be required, provided to them, and the optional clothing they may purchase. The Head Athletic Trainer is the administrator responsible for the required clinical clothing. The Head Athletic Trainer serves on the institutional logo committee and consults her colleagues and students regarding style, size, required and optional clothing.

## **Maintenance of CPR certification**

Maintain CPR certification. All students taking ATR 102 in their freshman year will receive their CPR and AED certification card at the end of the respective semester. Students will be responsible for maintaining the CPR and AED certification while in the program. The cost of the course will be the responsibility of the student. Current course fees range from \$50-\$75 depending on where the student decides to take the recertification course.

## **Eligibility**

Students are eligible to be considered for the Point Loma Nazarene University ATP when the following criteria are met:

- Submit an ATP Application for Admission\* by February 15.
- Submit three letters of recommendation on the ATP form.\*
- Complete all competencies required in KIN 280 - Introduction to Athletic Training and the companion laboratory KIN 280L and achieve a grade of B- or better.
- Complete all competencies in ATR 102 Risk Management and Emergency Response and ATR 102L Risk Management and Emergency Response Lab and achieve a grade of B- or better.
- Completion of 36 hours of observation in the PLNU Athletic Training Clinic verified by a PLNU ATC. Transfer students may do their observation in another Athletic Training setting, with hours verified by an ATC who must have their signature notarized.
- Have a minimum grade point-average of 2.500\*\*.
- Submit a PLNU physical examination form\*, see under Health Status below.
- Meet and certify understanding of the Technical Standards for Admission to the ATP.
- Agree to and sign the PLNU Mission Statement Code of Conduct
- Submit immunization record\*.
- Complete an interview with the ATP Admissions Committee.

\* Available on the PLNU ATP Web site

\*\* Probationary admission status may be considered under special circumstances.

## **Selection**

The ATP Admissions Committee, comprised of ATP faculty members and one student from each of the three student cohorts, rate each applicant on the following: quality of application, letters of recommendation, interview, clinical observation experience, grades in required courses, cumulative GPA, and completion of Technical Standards assessment and Code of Conduct endorsement.

Students are selected for admission to the ATP in March and begin the program in August of the following academic year. These students are deemed the cohort of the year they are projected to graduate.

## Health Status

Submit a PLNU physical examination form completed by a physician or physician assistant stipulating the candidate is physically able to meet the technical standards and perform the duties of an Athletic Training student.

Students must have current immunizations prior to beginning their sophomore clinical courses. Immunization reporting form is available on the ATP Website.

## Probationary Admission Status

Should an applicant not meet the required prerequisite course grades or cumulative GPA requirement, he/she may apply to the program and be considered for a probationary admission status if all other admission criteria are met. A student admitted to the ATP on probationary status must meet the requirements for retention in the ATP as outlined below, or that student is not permitted to continue in the program.

## Retention

All students admitted to the ATP must maintain the following minimum standards to remain in good standing in the program:

- Maintain a 2.500 cumulative GPA.
- Adhere to and exhibit high levels of performance on the Technical Standards and enthusiastically adhere to and promote the Mission of the PLNU ATP.
- Earn a grade of C or better in the following courses: ATR 290, ATR 291, ATR 385, ATR 387, ATR 388, ATR 390, ATR 391, ATR 410, ATR 415, ATR 460, ATR 493, ATR 494.

## Program Provisions

- Students are required to commute to off-campus internships via their own transportation arrangements.
- Students are required to wear clothing that identifies them as an athletic training student from PLNU. Most items are provided to students by the ATP.
- To complete the ATP course of study requires a minimum of three academic years.

## Transfer Student Policy

Transfer students may apply and gain admission to the ATP under the following provisions, which should be met prior to application to the program:

- After admission to the university and the ATP, completion of the degree in Athletic Training requires a minimum of six semesters (typically three years) regardless of student classification and number of semester units completed.
- All applicants are required to complete 36 hours of directed observation and all prerequisite courses (ATR 102 - Risk Management and Emergency Response, ATR 102L Risk Management and Emergency Response Lab, KIN 280 - Introduction to Athletic Training, and KIN 280L - Introduction to Athletic Training Lab or their equivalents) prior to application.

- All prerequisite course work required for admission to the ATP completed at another institution prior to matriculation to PLNU must be judged to be equivalent to PLNU courses. The student must demonstrate attainment of educational competencies required in those three courses by submitting the following to the ATP director prior to applying: 1) official transcript(s) and course descriptions of all prerequisite courses with grades of B- or higher, 2) a university catalog copy showing prerequisite course descriptions, and 3) a course syllabus or contact information for the faculty who taught each of the courses.

Any Certified Athletic Trainer (ATC) may verify the 36 hours of required observation in an Athletic Training setting. If the verifying AT is not an employee of PLNU, a notary public must authenticate the signature. The log of hours and the AT verification of those hours must be presented with the ATP application on the form found on the ATP Website.

## Admission for Student-Athletes

Student-athletes may apply and be admitted to the ATP under the following provisions, which are stipulated to the individuals prior to application to the program via academic advisement:

- The quality and quantity of time, effort and proficiency of clinical education in the Athletic Training program cannot be compromised for any reason.
- The didactic courses and lab experiences are scheduled in such a way that conflict with practice and game assignments for an athlete are minimal. However, afternoon and evening athletic activities and Athletic Training schedules often conflict. The student must make provision for being available for assigned clinical assignments an academic priority.
- If conflict with the clinical courses cannot be resolved prior to the beginning of a semester, the student-athlete may opt for completion of that clinical experience at a later time with a different cohort of students and will be expected to demonstrate all clinical proficiencies and learning over time.
- Should the student-athlete opt for completion of a given clinical experience at a later time, the completion of the major may require additional semesters or enrollment in summer sessions for completion beyond the six semester minimum.

## Non-Discrimination Policy

The PLNU Athletic Training Program does not discriminate on the basis of gender, race, color, national or ethnic origin in any aspect of the administration of its educational program.

## Communicable Disease Policy

The communicable disease policy is designed to provide methods for reducing the transmission of infectious diseases from athletic training personnel (ATC, ATS) to patients and from patients to athletic training personnel. Prevention of transmission of such diseases includes immunizations for vaccine preventable diseases, isolation precautions to prevent exposures to infectious agents, and management of athletic training personnel exposure to infected persons. The objectives of this policy include the following: (1) education athletic training personnel about the principles of infection control and stressing individual responsibility for infection control (2) collaboration with other departments to help ensure adequate surveillance of infections in personnel and provision of prevention services (3) providing care to athletic training personnel for work-related illnesses or exposures, and (4) identifying work-related infection risks and instituting appropriate preventative measures. This policy will follow the guidelines set by the Centers for Disease Control and Prevention in the "SPECIAL ARTICLE, Guideline for infection control in health care personnel, 1998". (Published in *AJIC: American Journal of Infection control* (1998; 26:289-354)).

Athletic training personnel are encouraged to report any infectious disease/problem condition to their direct supervisor. Athletic training personnel are restricted from patient contact, or contact with the patient's environment if they have an infectious communicable disease. Athletic training students would report to their ACI and the program director. Certified athletic trainers would report to the Director of Rehabilitation Services. Personnel who have been acutely

exposed to a potential infection disease would follow the Biohazard Exposure Control Plan. In the case that athletic training personnel refuse or are unwilling to report their condition to their supervisor for some reason, they must make sure they are restricting themselves from patient contact, or contact with the patient's environment.

Athletic training personnel known to be infected with a communicable disease can be excluded from duty. The type and duration of work restrictions will be dependent upon the type of disease/problem, by the mode of transmission and the epidemiology of the disease. The ATEP Program Director, Director of Rehabilitation Services, and/or treating Physician, will determine the duration and type of work or clinical restriction imposed for athletic training students. The Director of Rehabilitation Services and/or treating Physician, will determine the duration and type of work or clinical restriction imposed for certified athletic trainers.

When an ATS is sick, the following guidelines are to be followed:

ATS's will not report for duty if their illness:

- Results in a fever over 101°
- Will be exacerbated by being in the clinic and physically active
- Jeopardizes the health of clinical staff and clients

## National Certification

Upon completion of the baccalaureate degree in Athletic Training, students are eligible to apply for and take the NATA Board of Certification examination. Athletic Training Students who pass the national examination become Certified Athletic Trainers.

## Exercise and Sport Science, B.A.

### Program Learning Outcomes

**Students who complete the program in Exercise and Sport Science will be able to:**

1. Explain the health benefits associated with physical activity and exercise, as well as the health consequences associated with inactivity.
2. Describe the metabolic, physiologic, biomechanical, and developmental mechanisms by which participation in physical activity aids in health promotion and disease prevention.
3. Critically evaluate and integrate new information into professional practice in order to solve relevant health problems; speak and write effectively to a target audience on the prevention and intervention of such problems.
4. Competently measure and assess fitness, movement skills, physical performance, and risk for disease.
5. Design an exercise or strength training program to enhance all components of fitness, promote health, and optimize performance.
6. Serve various populations, integrating compassionate care and the Christian faith with their professional practice.

### Lower-Division Requirements

- ATR 102 - Risk Management and Emergency Response **(1) and**
- ATR 102L - Risk Management and Emergency Response Laboratory **(1)**  
**OR** either Certification in First Aid and CPR or complete a DOT-compliant EMT-Basic course\*  
\*Student must provide course completion certificate.
- BIO 130 - Human Anatomy and Physiology I (GE) **(4)**

- BIO 140 - Human Anatomy and Physiology II (4)
- KIN 101 - Orientation to Kinesiology (1)
- KIN 280 - Introduction to Athletic Training (2)
- KIN 280L - Introduction to Athletic Training Lab (1)
- PED 200 - Optimal Health (GE) (2)
  
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4)
- OR**
- CHE 152 - General Chemistry I (GE) (4)

## Lower-Division Elective

*Choose one course (2-3 units) from the following:*

- EXS 201 - Fundamentals of Fitness Assessment and Development (2)
- PED 220 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 225 - Individual and Dual Sports (GE) (2)
- FCS 225 - Fundamentals of Nutrition (3)

**Total: 22-24 Units**

## Upper-Division Requirements

- EXS 330 - Nutrition for Exercise and Sport Performance (3)
- EXS 350 - Fitness Assessment and Exercise Prescription (3)
- EXS 350L - Fitness Assessment and Exercise Prescription Lab (1)
- EXS 370 - Praxis of Strength Training and Conditioning (3)
- EXS 480 - Leadership in the Fitness Professions (3)
- KIN 312 - Motor Learning and Motor Development (3)
- KIN 325 - Structural Kinesiology (2)
- KIN 327 - Applied Biomechanics (2)
- KIN 340 - Physiology of Exercise (3)
- KIN 340L - Physiology of Exercise Lab (1)
- KIN 440 - Measurement, Statistics, and Evaluation of Human Performance (3)

## Required Concentration

*Choose at least six (6) units from one concentration below and two (2) units of Professional Experience for a total of eight (8) units. Other Upper Division units leading to a credential or minor such as teaching or nutrition may be substituted upon approval by the department chair.*

### Fitness Professional Concentration

- ATR 385 - Pathology of Injury and Illness (3)
- ATR 410 - Therapeutic Exercise (3)
- BUS 313 - Administrative Communication (3)
- FCS 305 - Life Cycle Nutrition (4)

- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- KIN 430 - Clinical Exercise Physiology **(3)**
- KIN 484 - Practicum in Kinesiology **(1-3)**
- KIN 488 - Internship in Kinesiology **(1-3)**
- KIN 490 - Special Studies in Kinesiology **(1-3)**

### Physical Education and Sport Performance Concentration

- BUS 313 - Administrative Communication **(3)**
- EDU 302 - Foundations of Education and Learning Theory **(3)**
- FCS 305 - Life Cycle Nutrition **(4)**
- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- PED 308 - Methods of Teaching Physical Education **(3)**
- KIN 484 - Practicum in Kinesiology **(1-3)**
- KIN 488 - Internship in Kinesiology **(1-3)**
- PED 350 - Foundations and Techniques of Coaching **(4)**
- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**

### Professional Experience Requirements

*Two units are required in Practicum and/or Internship and/or Special Studies. Each course may be repeated up to six (6) units.*

- KIN 484 - Practicum in Kinesiology **(1-3)**
- KIN 488 - Internship in Kinesiology **(1-3)**
- KIN 490 - Special Studies in Kinesiology **(1-3)**

**Total: 36 Units**

### **Minor**

### **Athletic Coaching Minor**

#### Requirements

- KIN 280 - Introduction to Athletic Training **(2)**
- KIN 280L - Introduction to Athletic Training Lab **(1)**
- PED 200 - Optimal Health (GE) **(2) \***
- PED 350 - Foundations and Techniques of Coaching **(4)**
- EXS 330 - Nutrition for Exercise and Sport Performance **(3)**
- EXS 370 - Praxis of Strength Training and Conditioning **(3)**
- KIN 484 - Practicum in Kinesiology **(1-3) 3 Units Required OR**
- KIN 488 - Internship in Kinesiology **(1-3) 3 Units Required**

One of the following:

- PED 220 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 225 - Individual and Dual Sports (GE) (2)

**Total: 20 Units**

(Includes 4 units that meet general education requirements)

Note(s):

*\*Satisfies general education requirement*

## **Department of Mathematical, Information, and Computer Sciences**

### **Mission Statement**

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

### **Purposes**

1. To prepare students for:
  - careers that use mathematics, computer science, and information systems in business, industry, government and the non-profit sector.
  - graduate study in fields related to mathematics, computer science, and information systems.
  - teaching mathematics and computer science at the secondary level.
2. To prepare students to apply their knowledge and utilize appropriate technology to solve problems.
3. To educate students to speak and write about their work with precision, clarity, and organization.
4. To help students gain an understanding of, and appreciation for, the historical development, contemporary progress, and societal role of mathematics, information systems, and computer science.
5. To integrate the study of mathematics, information systems, and computer science with the Christian liberal arts.

### **Tradition of Excellence**

The Department of Mathematical, Information, and Computer Sciences features a highly skilled team of professors who share their wealth of knowledge with students both in and out of the classroom. The personal attention of the faculty and innovative learning environment help students to comprehend concepts in mathematics, information systems, and computer science. The accomplished faculty also conducts research with current students. Recently, topics have included random number generation, music and graph theory, statistics, stereo vision using genetic algorithms, artificial intelligence, biomathematics, and computer architecture. These types of research opportunities provide experience with modern technology and current real-world applications.

### **Career Opportunities**

Students who graduate with a degree from the Department of Mathematical, Information, and Computer Sciences are prepared to succeed. Students have chosen careers in actuarial science, industrial engineering, information science, applied mathematics, statistics, espionage, teaching, software engineering, project management, and systems analysis.

## Faculty

Ryan T. Botts, Ph.D.  
*Ohio University, Athens*

Lorinda J. Carter, Ph.D.  
*University of California, San Diego*

Catherine Lynn Crockett, Ph.D.  
*University of California, Riverside*

Gregory D. Crow, Ph.D.  
*University of Notre Dame*

Jesús Jiménez, Ph.D.  
*University of Utah*

Michael Leih, Ph.D.  
*Claremont Graduate University*

Benjamin Mood, Ph.D.  
*University of Florida, Gainesville*

Maria R. Zack, Ph.D., Chair  
*University of California, San Diego*

## Major

### Computer Science: Software Engineering, B.A.

#### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

#### Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming **(3)**
- CSC 154 - Objects and Elementary Data Structures **(4)**
- CSC 254 - Data Structures and Algorithms **(4)**
- MTH 164 - Calculus I (GE) **(4)** \*

- MTH 203 - Introduction to Statistics (3) \*\*
- PHL 211 - Ethics (GE) (3)

Total Lower Division Units: 21 (14 non-GE units)

Note(s):

\*MTH 144 may substitute for MTH 164 .

\*\* MTH 363 - Calculus Based Statistics with R (3) or MTH 383 - Mathematical Probability and Statistics (3) may substitute for this class.

## Upper-Division Requirements

- BUS 313 - Administrative Communication (3)
- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- CSC 394 - Programming Languages (4)
- CSC 454 - Computer Architecture and Assembly Language (4)
- CSC 481 - Senior Seminar in Computer Science (1)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 343 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2) **AND**
- CSC 499 - Independent Research in Computer Science II (1)
- ISS 472 - Internship in Information Systems (2)
- HON 498 - Honors Project I (2) **AND**
- HON 499 - Honors Project II (1)

Total Upper Division Units: 30-31

4-5 additional units chosen from:

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- CSC 412 - Topics in Computer Science (2)
- CSC 491 - Independent Studies in Computer Science (1-4)
- CSC 493 - Software Project (3)
- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2)
- CSC 499 - Independent Research in Computer Science II (1)

- ISS 373 - Networking and Security (3)
- ISS 392 - Topics in Cyber Security (2)
- ISS 403 - Information and Computer Security (3)
- ISS 472 - Internship in Information Systems (2)
- MTH 174 - Calculus II (4)
- MTH 233 - Linear Algebra (3)
- MTH 274 - Calculus III (4)
- MTH 373 - Mathematical Modeling (3)
- HON 498 - Honors Project I (2)
- HON 499 - Honors Project II (1)

Total Units: 49 Units Without GE

## Computer Science: Software Engineering, B.S.

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

### Lower Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)
- MTH 164 - Calculus I (GE) (4) \*
- MTH 174 - Calculus II (4)
- MTH 203 - Introduction to Statistics (3) \*\*
- PHL 211 - Ethics (GE) (3)

Total Lower Division Units: 25 (18 units other than GE)

\*MTH 144 may substitute for MTH 164 .

\*\* MTH 363 - Calculus Based Statistics with R (3) or MTH 383 - Mathematical Probability and Statistics (3) may substitute for this class.

### Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- CSC 394 - Programming Languages (4)
- CSC 454 - Computer Architecture and Assembly Language (4)
- CSC 481 - Senior Seminar in Computer Science (1)
- CSC 493 - Software Project (3)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 343 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2) **AND**
- CSC 499 - Independent Research in Computer Science II (1)
- ISS 472 - Internship in Information Systems (2)
- HON 498 - Honors Project I (2) **AND**
- HON 499 - Honors Project II (1)

**Total Upper Division Units: 33-34**

6-7 additional units chosen from (7 units if ISS472 chosen for sequence above):

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- CSC 412 - Topics in Computer Science (2)
- CSC 491 - Independent Studies in Computer Science (1-4)
- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2)
- CSC 499 - Independent Research in Computer Science II (1)
- HON 498 - Honors Project I (2)
- HON 499 - Honors Project II (1)
- ISS 373 - Networking and Security (3)
- ISS 392 - Topics in Cyber Security (2)
- ISS 403 - Information and Computer Security (3)
- ISS 472 - Internship in Information Systems (2)

**Total Elective Units: 6-7**

Total: 59 Units Without GE

## **Computer Science: Technical Applications, B.S.**

Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

## Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 203 - Introduction to Statistics (3) \*
- MTH 233 - Linear Algebra (3)
- PHL 211 - Ethics (GE) (3)

Total: 28 Units (22 units other than GE)

\* MTH 363 - Calculus Based Statistics with R (3) or MTH 383 - Mathematical Probability and Statistics (3) may substitute for this class.

## Upper-Division Requirements

- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- CSC 394 - Programming Languages (4)
- CSC 454 - Computer Architecture and Assembly Language (4)
- CSC 481 - Senior Seminar in Computer Science (1)
- CSC 493 - Software Project (3)
- ISS 373 - Networking and Security (3)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 343 - Discrete Mathematics (3)

## Elective Options

Choose one sequence from:

- CSC 495 - Service Learning in Computer Science (3)
- CSC 498 - Independent Research in Computer Science I (2) *AND*
- CSC 499 - Independent Research in Computer Science II (1)

- ISS 472 - Internship in Information Systems (2)
- HON 498 - Honors Project I (2) *AND*
- HON 499 - Honors Project II (1)

**Total Upper Division Units: 31-32**

5-6 additional units chosen from:

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
  - CSC 311 - R for Computational Science (1)
  - CSC 412 - Topics in Computer Science (2)
  - CSC 491 - Independent Studies in Computer Science (1-4)
  - CSC 495 - Service Learning in Computer Science (3)
  - CSC 498 - Independent Research in Computer Science I (2)
  - CSC 499 - Independent Research in Computer Science II (1)
  - ISS 342 - Project Management and Quality Assurance (2)
  - ISS 392 - Topics in Cyber Security (2)
  - ISS 403 - Information and Computer Security (3)
  - ISS 472 - Internship in Information Systems (2)
  - MTH 274 - Calculus III (4)
  - MTH 373 - Mathematical Modeling (3)
  - HON 498 - Honors Project I (2)
  - HON 499 - Honors Project II (1)
- Total Elective Units: 5-6 (6 if ISS472 selected above in choose one)**

Total: 59 Units Without GE

Note(s):

*An elective class may not count as both upper-division core and a required "additional elective."*

## **Information Systems (Mathematical, Information, and Computer Science), B.S.**

### **Program Learning Outcomes**

Students who complete the program in Information Systems will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
  - a. *Students will be able to speak about their work with precision, clarity and organization*

- b. *Students will be able to write about their work with precision, clarity and organization*
  - c. *Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.*
4. Formulate decisions informed by ethical attitudes and values.
  5. Collaborate effectively in teams.
  6. Write correct and robust software.
  7. Analyze the interaction between hardware and software.
  8. Apply their technical knowledge and critical thinking to solve problems.
  9. Understand and create arguments supported by quantitative evidence.
  10. Demonstrate knowledge of information systems and be prepared for careers that use information systems, and graduate study in fields related to information systems.

## Lower Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)
- BUS 100 - Introduction to Business (3)
- BUS 201 - Legal Environment of Business (3)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)
- ECO 100 - Survey of Economics (GE) (3)
- MGT 212 - Principles of Management (3)
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)

Total: 34 Units

## Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- CSC 314 - Operating Systems (4)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 373 - Networking and Security (3)
- ISS 403 - Information and Computer Security (3)
- ISS 414 - Data Base Systems and Web Integration (4)
- ISS 472 - Internship in Information Systems (2)
- ISS 481 - Senior Seminar in Information Systems (1)
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Total: 34 Units

Major Total: 68 Units

## Recommended:

- Cross-cultural experience
- ISS 392 - Topics in Cyber Security (2)
- PHL 211 (GE) (3)
- CSC 323 Software Engineering (3)

## Notes:

- MTH144 or MTH164 may substitute for MTH173. MTH144, MTH164 or MTH173 fulfills the General Education Problem Solving requirement.
- ECO101 and ECO102 may substitute for ECO100. ECO100, ECO101 or ECO102 fulfills the General Education Social World requirement.
- PHL211 fulfills the General Education Philosophy requirement.

## Mathematics, B.A.

### Program Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.
11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

### Lower-Division Requirements

- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 233 - Linear Algebra (3)
- MTH 242 - Number Theory with Proofs (2)
- MTH 274 - Calculus III (4)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)

Total Lower Division Units: 24 (20 non-GE units)

### Upper-Division Requirements

- MTH 352 - History of Mathematics (2)
- MTH 383 - Mathematical Probability and Statistics (3)
- MTH 481 - Senior Seminar in Mathematics (1)

Choose one course from:

- MTH 424 - Real Analysis (4)
- MTH 444 - Abstract Algebra (4)

Choose one course from:

- MTH 333 - Differential Equations (3)
- MTH 343 - Discrete Mathematics (3)
- MTH 373 - Mathematical Modeling (3)
- MTH 413 - Complex Analysis (3)

Choose one sequence from:

- MTH 495 - Service Learning in Mathematics (3)
- MTH 498 - Independent Research in Mathematics I (2) *AND*
- MTH 499 - Independent Research in Mathematics II (1)
- HON 498 - Honors Project I (2) *AND*
- HON 499 - Honors Project II (1)

Eight additional elective units from:

- MTH 333 - Differential Equations (3)
- MTH 343 - Discrete Mathematics (3)
- MTH 373 - Mathematical Modeling (3)
- MTH 402 - Topics in Geometry (2)
- MTH 413 - Complex Analysis (3)
- MTH 424 - Real Analysis (4)
- MTH 444 - Abstract Algebra (4)
- MTH 471 - History of Mathematics Study Tour (1)
- MTH 491 - Independent Study in Mathematics (1-4)
- MTH 492 - Special Topics in Mathematics (2)
- MTH 495 - Service Learning in Mathematics (3)
- MTH 498 - Independent Research in Mathematics I (2)
- MTH 499 - Independent Research in Mathematics II (1)
- CSC 311 - R for Computational Science (1)
- ECO 460 - Applied Econometrics (3)
- HON 498 - Honors Project I (2)
- HON 499 - Honors Project II (1)

Total: 8 Units

Total Non-GE Units: 44

Note(s):

*An elective class may not count as both upper-division core and a required "additional elective."*

## **Mathematics, B.S.**

### Program Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.
11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

### Lower-Division Requirements

- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 233 - Linear Algebra (3)
- MTH 242 - Number Theory with Proofs (2)
- MTH 274 - Calculus III (4)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)
- PHY 241 - University Physics I (GE) (4)

Total: 30 Units (22 non-GE units)

### Upper-Division Requirements

- MTH 333 - Differential Equations (3)
- MTH 352 - History of Mathematics (2)
- MTH 383 - Mathematical Probability and Statistics (3)
- MTH 424 - Real Analysis (4)
- MTH 444 - Abstract Algebra (4)
- MTH 481 - Senior Seminar in Mathematics (1)

- MTH 492 - Special Topics in Mathematics (2)

Choose two courses from:

- MTH 343 - Discrete Mathematics (3)
- MTH 373 - Mathematical Modeling (3)
- MTH 413 - Complex Analysis (3)

Choose one sequence from:

- MTH 495 - Service Learning in Mathematics (3)
- MTH 498 - Independent Research in Mathematics I (2) *AND*
- MTH 499 - Independent Research in Mathematics II (1)
- HON 498 - Honors Project I (2) *AND*
- HON 499 - Honors Project II (1)

Five (5) additional elective units from:

- MTH 343 - Discrete Mathematics (3)
- MTH 373 - Mathematical Modeling (3)
- MTH 402 - Topics in Geometry (2)
- MTH 413 - Complex Analysis (3)
- MTH 471 - History of Mathematics Study Tour (1)
- MTH 491 - Independent Study in Mathematics (1-4)
- MTH 492 - Special Topics in Mathematics (2)
- MTH 495 - Service Learning in Mathematics (3)
- MTH 498 - Independent Research in Mathematics I (2)
- MTH 499 - Independent Research in Mathematics II (1)
- ECO 460 - Applied Econometrics (3)
- CSC 311 - R for Computational Science (1)
- HON 498 - Honors Project I (2)
- HON 499 - Honors Project II (1)

Total: 36 Units

Note(s):

*An elective class may not count as both upper-division core and a required "additional elective."*

Total non-GE units: 58

Recommended Electives for Mathematics Tracks:

**Graduate School:** One semester of independent study continuing Abstract Algebra or Real Analysis, Complex Analysis, Honors Project or Independent Research in Mathematics.

**Teaching:** To prepare for the State of California exams necessary for obtaining a single subject credential in mathematics: Topics in Geometry, Mathematical Probability, Discrete Mathematics, Complex Analysis and EDU 433 (3) Methods for Teaching Secondary Mathematics. In addition, EDU 302 - Foundations of Education and Learning Theory and EDU 404 - Foundations of Special Education can be taken as an undergraduate preparation for taking graduate classes for a teaching credential.

**Industry:** Complex Analysis, Mathematical Probability, and Mathematical Modeling. Additional knowledge of computer programming and software tools such as Matlab and R can be helpful in this field.

**Actuary:** MTH 383 Mathematical Probability and Statistics, MTH 343 Discrete Mathematics, MTH 373 Mathematical Modeling will help you prepare for actuarial exams. We recommend that you take the first exam as soon as you finish MTH 383 . The Society of Actuaries has also approved:

ECO 101 Macroeconomics, ECO 102 Microeconomics to meet their economics requirement (you must get at least a B in each). The Society of Actuaries has also approved the sequence: ACC 200 ( ACC 201 Principles of Financial Accounting I can be substituted), FIN 335 Business Finance and FIN 385 Intermediate Finance to meet their finance requirement. So with some work you can meet 3 of the 10 items required for becoming a Fellow of the Society of Actuaries before you graduate from college. It is also worth noting that by adding a few classes to this list, you can earn a minor in Finance.

## Minor

### Computational Science Minor - Biology/Environmental Science (Mathematics and Computer Science)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

### Courses for Biology/Environmental Science Emphasis

#### Lower-Division Requirements

- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- CSC 143 - Introduction to Computer Programming (3)

#### Upper-Division Requirements

- BIO 363 - Conservation Ecology (3)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)

**PROJECT:** *(Choose At Least 3 Units)*

- HON 498 - Honors Project I (2) and
- HON 499 - Honors Project II (1)

OR

- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### Biology Major - Required Courses

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

Minor Total for Biology Majors: 25

### Computer Science Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 363 - Calculus Based Statistics With R (3) OR
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 27

### Mathematics Majors - Required Courses

- MTH 164 - Calculus I (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 25

## **Computational Science Minor - Biology/Genetics (Mathematics and Computer Science)**

### Core Courses for Biology/Genetics Emphasis

#### Lower-Division Requirements

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- CSC 143 - Introduction to Computer Programming (3)

#### Upper-Division Requirements

- BIO 345 - Genetics (4)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)

**PROJECT:** *(Choose at least 3 units)*

- HON 498 - Honors Project I **(2) and**
- HON 499 - Honors Project II **(1)**  
OR
- MTH 495 - Service Learning in Mathematics **(3)**  
OR
- CSC 495 - Service Learning in Computer Science **(3)**

### Biology Major - Required Courses

- MTH 144 - Calculus With Applications (GE) **(4)**
- CSC 322 - Data Management for Computational Science **(2)**
- MTH 363 - Calculus Based Statistics With R **(3)**

Minor Total for Biology Majors: 26

### Computer Science Majors - Required Courses

- MTH 164 - Calculus I (GE) **(4)**
- ISS 414 - Data Base Systems and Web Integration **(4)**
- MTH 383 - Mathematical Probability and Statistics **(3)**

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- MTH 164 - Calculus I (GE) **(4)**
- CSC 322 - Data Management for Computational Science **(2)**
- MTH 383 - Mathematical Probability and Statistics **(3)**

Minor Total for Mathematics Majors: 26

## **Computational Science Minor - Chemistry (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

### Core Courses for Chemistry Emphasis

#### Lower-Division Requirements

- CHE 152 - General Chemistry I (GE) **(4)**

- CHE 153 - General Chemistry II (4)
- CSC 143 - Introduction to Computer Programming (3)
- MTH 164 - Calculus I (GE) (4)

### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)

**Project:** (*Choose at least 3 units*)

- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### Chemistry Major - Required Courses

- CHE 213 - Analytical Chemistry (3)
- CHE 325 - Physical Chemistry I (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)
- OR
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Chemistry Majors: 34

### Computer Science Majors - Required Courses

- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CHE 213 - Analytical Chemistry (3)
- CHE 325 - Physical Chemistry I (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 383 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 34

## Computational Science Minor - Physics (Mathematics and Computer Science)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

### Core Courses for Physics Emphasis

#### Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- MTH 164 - Calculus I (GE) (4)
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

#### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

#### Physics or Engineering-Physics Major - Required Courses

- EGR 120 - Computational Methods for Engineers & Scientists II (1)
- CSC 322 - Data Management for Computational Science (2)
- PHY 304 - Modern Physics (4)

**Project:** *(Choose at least 3 units)*

- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

Minor Total for PHY & PHY/EGR Majors: 30

#### Computer Science Majors - Required Courses

- CSC 311 - R for Computational Science (1)
- ISS 414 - Data Base Systems and Web Integration (4)

**PROJECT:** *(Choose at least 3 units)*

- HON 498 - Honors Project I (2) **and**

- HON 499 - Honors Project II **(1)**  
OR
- MTH 495 - Service Learning in Mathematics **(3)**  
OR
- CSC 495 - Service Learning in Computer Science **(3)**

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CSC 311 - R for Computational Science **(1)**
- CSC 322 - Data Management for Computational Science **(2)**
- PHY 304 - Modern Physics **(4)**

**PROJECT:** *(Choose at least 3 units)*

- HON 498 - Honors Project I **(2) and**
- HON 499 - Honors Project II **(1)**  
OR
- MTH 495 - Service Learning in Mathematics **(3)**  
OR
- CSC 495 - Service Learning in Computer Science **(3)**

Minor Total for Mathematics Majors: 32

## Computational Science Minor - Psychology (Mathematics and Computer Science)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics, or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross-disciplinary teams to solve challenging research problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### Core Courses for Psychology Emphasis

#### Lower Division Requirements

- PSY 103 - General Psychology (GE) **(3)**
- CSC 143 - Introduction to Computer Programming **(3)**

#### Upper Division Requirements

- PSY 320 - Social Psychology **(3)**
- PSY 301 - Physiological and Neuropsychology **(4) or**
- PSY 409 - Psychology of Cognition and Learning **(4)**
- CSC 302 - UNIX and Python Scripting for Computational Science **(2)**
- CSC 311 - R for Computational Science **(1)**

**Project:** (*choose at least 3 units*)

- HON 498 - Honors Project I **(2) and**
- HON 499 - Honors Project II **(1)**  
OR
- MTH 495 - Service Learning in Mathematics **(3)**  
OR
- CSC 495 - Service Learning in Computer Science **(3)**

## Psychology Majors - Required Courses

- MTH 144 - Calculus With Applications (GE) **(4)**
- CSC 322 - Data Management for Computational Science **(2)**
- MTH 363 - Calculus Based Statistics With R **(3)**

Minor Total for Psychology Majors: 28

## Computer Science Majors - Required Courses

- MTH 164 - Calculus I (GE) **(4)**
- ISS 414 - Data Base Systems and Web Integration **(4)**
- MTH 363 - Calculus Based Statistics With R **(3) OR**
- MTH 383 - Mathematical Probability and Statistics **(3)**

Minor Total for Computer Science Majors: 30

## Mathematics Majors - Required Courses

- MTH 164 - Calculus I (GE) **(4)**
- CSC 322 - Data Management for Computational Science **(2)**
- MTH 383 - Mathematical Probability and Statistics **(3)**

Minor Total for Mathematics Majors: 28

## Computer Science Minor

A minor in Computer Science is offered to those who wish to complement study in another discipline. This minor is not available to students who earn a major in Information Systems.

## Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming **(3)**
- CSC 154 - Objects and Elementary Data Structures **(4)**
- CSC 254 - Data Structures and Algorithms **(4)**

Total: 11 Units

## Upper-Division Requirements

Choose 10 units from:

- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- CSC 394 - Programming Languages (4)
- CSC 412 - Topics in Computer Science (2)
- CSC 454 - Computer Architecture and Assembly Language (4)
- ISS 373 - Networking and Security (3)
- ISS 414 - Data Base Systems and Web Integration (4)
- MTH 343 - Discrete Mathematics (3)

Total: 10 Units

Minor Total: 21 Units

## **Computer Technology - Business Minor (Math and Computer Science Majors)**

The Computer Technology - Business minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for math and computer science students who desire to enter the technology or computer science careers with a greater knowledge of business.

## Lower-Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- MGT 212 - Principles of Management (3)

Choose one course from the following:

- CSC 252 - Data Structures in C++ (2)
- CSC 254 - Data Structures and Algorithms (4)

Total: 15-17 Units

Note(s):

\* The ACC201 (4) and ACC202 (3) sequence may be substituted for ACC200.

## Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)

- ISS 342 - Project Management and Quality Assurance (2)
- ISS 414 - Data Base Systems and Web Integration (4)
- MKT 332 - Principles of Marketing (3)

Choose one course from the following:

- BUS 475 - Sustainability in Action (3)
- BUS 480 - International Business (3)
- MGT 320 - Organizational Behavior (3)
- MGT 374 - Human Resource Management (3)
- MGT 382 - Applied Entrepreneurship (3)
- MGT 412 - Leadership Theory and Practice (3)
- MGT 416 - Perspectives on Leadership (3)
- MGT 470 - Nonprofit Organization Management (3)
- MGT 484 - Operations Management (3)

Total: 14 Units

Minor Total: 29-31 Units

## **Computer Technology - Marketing Minor (Math and Computer Science Majors)**

The Computer Technology - Marketing minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for math and computer science students who desire to enter technology or computer science careers with a greater knowledge of marketing.

### Lower-Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)

Choose one course from the following:

- CSC 252 - Data Structures in C++ (2)
- CSC 254 - Data Structures and Algorithms (4)

Total: 12-14 Units

Note(s):

\* The ACC201 (4) and ACC202 (3) sequence may be substituted for ACC200.

### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- ISS 414 - Data Base Systems and Web Integration (4)
- MKT 332 - Principles of Marketing (3)

Choose two courses from the following:

- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)
- MKT 432 - Marketing Research (3)

Total: 15 Units

Minor Total: 27-29 Units

## **Mathematics Minor**

### Required Courses

- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 233 - Linear Algebra (3)

Choose 12 additional units from:

- MTH 242 - Number Theory with Proofs (2)
- MTH 274 - Calculus III (4)
- MTH 333 - Differential Equations (3)
- MTH 343 - Discrete Mathematics (3)
- MTH 352 - History of Mathematics (2)
- MTH 363 - Calculus Based Statistics With R (3) \*
- MTH 373 - Mathematical Modeling (3)
- MTH 383 - Mathematical Probability and Statistics (3) \*
- MTH 402 - Topics in Geometry (2)
- MTH 413 - Complex Analysis (3)
- MTH 424 - Real Analysis (4)
- MTH 444 - Abstract Algebra (4)
- MTH 471 - History of Mathematics Study Tour (1)
- MTH 492 - Special Topics in Mathematics (2)

Minor Total: 23 Units

Note(s):

\*Only one of these may be taken

## **Software Engineering Minor**

### Lower-Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)

### Upper Division Requirements

- CSC 314 - Operating Systems (4)
- CSC 323 - Software Engineering (3)
- MTH 343 - Discrete Mathematics (3)

### Choose One Course From:

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 322 - Data Management for Computational Science (2)

Total Units: 23

## **Certificate**

### **Software Engineering Certificate**

#### Lower Division Requirements

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 254 - Data Structures and Algorithms (4)

#### Upper Division Requirements

- CSC 312 - Operating Systems for Software Engineering Certificate (2)
- CSC 323 - Software Engineering (3)

Total units for the certificate: 16

## **Department of Physics and Engineering**

### **Mission Statement**

The Physics and Engineering Department at PLNU provides strong programs of study in the fields of Physics and Engineering. Our students are well prepared for graduate studies and careers in scientific and engineering fields. We emphasize a collaborative learning environment which allows students to thrive academically, build personal confidence, and develop interpersonal skills. We provide a Christian environment for students to learn values and judgment and pursue integration of modern scientific knowledge and Christian faith.

Four programs of study are provided:

- B.S. degree in Physics
- B.S. degree in Engineering Physics, with emphases in Mechanics and Electrodynamics
- B.A. degree in Physics
- Minor in Physics

## Purposes

- To prepare students for graduate studies in physics or engineering;
- To prepare students for a career in research or teaching;
- To prepare students for employment in various fields of applied physics and engineering;
- To satisfy pre-professional requirements for students choosing to attend engineering or architectural schools.

## Tradition of Excellence

The Department of Physics and Engineering offers an excellent education in a vibrant Christian setting. Caring and knowledgeable faculty engage students with one-on-one instruction and in smaller-sized classes. A number of our students gain practical work experience at Space and Naval Warfare Systems Command (SPAWAR) and engineering firms in the area. During the summer, our students participate in research on campus as well as at other undergraduate research programs around the country.

## Career Opportunities

Most Physics majors continue their education in graduate school and eventually become research scientists or teachers. The Engineering Physics majors focus on electronic circuit and computer hardware design. Graduates with this major have the option to attend graduate school or enter the job market in industry or government immediately after graduation. Point Loma offers both a Bachelor of Science and a Bachelor of Arts in Physics as well as a Bachelor of Science in Engineering Physics.

## Faculty

Michelle Chen, Ph.D.  
*University of Pennsylvania*

Ron DeLap, Ph.D.  
*University of Michigan*

Paul Schmelzenbach, Ph.D.  
*Oregon State University*

Maria Zack, Ph.D., Chair  
*University of California, San Diego*

## Major

### Engineering Physics, B.S.

#### Program Learning Outcomes

Students who complete the Engineering Physics program will:

1. Develop an understanding of the fundamental principles of physics and of engineering.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

#### Core Curriculum

The following courses are required of all Physics and Engineering Physics majors:

- EGR 110 - Computational Methods for Engineers and Scientists I (1)
- EGR 120 - Computational Methods for Engineers & Scientists II (1)
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)
- PHY 304 - Modern Physics (4)
- PHY 341 - Analytical Mechanics (4)
- PHY 361 - Electricity, Magnetism, and Waves I (3)
- PHY 362 - Electricity, Magnetism, and Waves II (3)
- PHY 401 - Thermodynamics (3)
- PHY 431 - Quantum Mechanics (3)
- PHY 475 - Senior Laboratory and Student Project (2)
- PHY 495 - Seminar in Physics (1)
- CHE 152 - General Chemistry I (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 174 - Calculus II (4)
- MTH 274 - Calculus III (4)
- MTH 333 - Differential Equations (3)

Total: 52 Units

#### Recommended

- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- MTH 233 - Linear Algebra (3)

## Requirements

There are two possible options in the Engineering Physics Major:

- Emphasis in Mechanics
- Emphasis in Electrodynamics

### Emphasis in Mechanics

- EGR 215 - Engineering Mechanics (3)
- EGR 265 - Mechanics of Materials (3)
- EGR 352 - Analog Electronics (2)
- EGR 422 - Digital Electronics (2)

Complete one of the following courses

- PHY 311 - Nuclear Physics (3)
- PHY 443 - Solid State Physics (3)

Total: 13 Units

### Emphasis in Electrodynamics

- EGR 225 - Electronics Circuits Analysis (3)
- EGR 352 - Analog Electronics (2)
- EGR 422 - Digital Electronics (2)
- EGR 432 - Computer Interfacing (2)
- EGR 442 - Mobile Robotics (2)

Complete one of the following courses:

- PHY 311 - Nuclear Physics (3)
- PHY 443 - Solid State Physics (3)

Total: 14 Units

## Physics, B.A.

### Program Learning Outcomes

**Students who complete the Physics B.A. program will:**

1. Develop an understanding of the fundamental principles of physics.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.

5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

## Core Curriculum

The following courses are required of all Physics and Engineering Physics majors:

- EGR 110 - Computational Methods for Engineers and Scientists I **(1)**
- EGR 120 - Computational Methods for Engineers & Scientists II **(1)**
- PHY 241 - University Physics I (GE) **(4)**
- PHY 242 - University Physics II **(4)**
- PHY 304 - Modern Physics **(4)**
- PHY 341 - Analytical Mechanics **(4)**
- PHY 361 - Electricity, Magnetism, and Waves I **(3)**
- PHY 362 - Electricity, Magnetism, and Waves II **(3)**
- PHY 401 - Thermodynamics **(3)**
- PHY 431 - Quantum Mechanics **(3)**
- PHY 475 - Senior Laboratory and Student Project **(2)**
- PHY 495 - Seminar in Physics **(1)**
- CHE 152 - General Chemistry I (GE) **(4)**
- MTH 164 - Calculus I (GE) **(4)**
- MTH 174 - Calculus II **(4)**
- MTH 274 - Calculus III **(4)**
- MTH 333 - Differential Equations **(3)**

Total: 52 Units

## Recommended

- CSC 143 - Introduction to Computer Programming **(3)**
- CSC 154 - Objects and Elementary Data Structures **(4)**
- MTH 233 - Linear Algebra **(3)**

## Requirements

The following courses are required in addition to the core curriculum to earn a B.A. in Physics:

- CHE 153 - General Chemistry II **(4)**

One of the following courses:

- PHY 311 - Nuclear Physics **(3)**
- PHY 443 - Solid State Physics **(3)**

Total: 7 Units

# Physics, B.S.

## Program Learning Outcomes

### Students who complete the Physics B.S. program will:

1. Develop an understanding of the fundamental principles of physics.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

## Core Curriculum

The following courses are required of all Physics and Engineering Physics majors:

- EGR 110 - Computational Methods for Engineers and Scientists I **(1)**
- EGR 120 - Computational Methods for Engineers & Scientists II **(1)**
- PHY 241 - University Physics I (GE) **(4)**
- PHY 242 - University Physics II **(4)**
- PHY 304 - Modern Physics **(4)**
- PHY 341 - Analytical Mechanics **(4)**
- PHY 361 - Electricity, Magnetism, and Waves I **(3)**
- PHY 362 - Electricity, Magnetism, and Waves II **(3)**
- PHY 401 - Thermodynamics **(3)**
- PHY 431 - Quantum Mechanics **(3)**
- PHY 475 - Senior Laboratory and Student Project **(2)**
- PHY 495 - Seminar in Physics **(1)**
- CHE 152 - General Chemistry I (GE) **(4)**
- MTH 164 - Calculus I (GE) **(4)**
- MTH 174 - Calculus II **(4)**
- MTH 274 - Calculus III **(4)**
- MTH 333 - Differential Equations **(3)**

Total: 52 Units

## Recommended

- CSC 143 - Introduction to Computer Programming **(3)**
- CSC 154 - Objects and Elementary Data Structures **(4)**
- MTH 233 - Linear Algebra **(3)**

## Requirements

The courses listed below are required in addition to the core curriculum to earn a B.S. degree in Physics.

- PHY 311 - Nuclear Physics (3)
- PHY 362 - Electricity, Magnetism, and Waves II (3)
- PHY 443 - Solid State Physics (3)
- CHE 153 - General Chemistry II (4)

At least four units from the following courses:

- EGR 422 - Digital Electronics (2)
- EGR 432 - Computer Interfacing (2)
- CHE 294 - Organic Chemistry I (4)

Total: 17 Units

## **Minor**

### **Computational Science Minor - Physics (Physics and Engineering)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry or Physics with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics or Physics.

## **Core Courses for Physics Emphasis**

### **Lower-Division Requirements**

- CSC 143 - Introduction to Computer Programming (3)
- MTH 164 - Calculus I (GE) (4)
- PHY 241 - University Physics I (GE) (4)
- PHY 242 - University Physics II (4)

### **Upper-Division Requirements**

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- 
- MTH 363 - Calculus Based Statistics With R (3) **OR**
- MTH 383 - Mathematical Probability and Statistics (3)

## **Physics or Engineering-Physics Major - Required Courses**

- EGR 120 - Computational Methods for Engineers & Scientists II (1)
- CSC 322 - Data Management for Computational Science (2)

- PHY 304 - Modern Physics (4)
- 
- **Project:** *(Choose at least 3 units)*
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

**Minor Total for PHY & PHY/EGR Majors: 30**

### **Computer Science Majors - Required Courses**

- CSC 311 - R for Computational Science (1)
- ISS 414 - Data Base Systems and Web Integration (4)
- 
- **PROJECT:** *(Choose at least 3 units)*
- 
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

**Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- CSC 311 - R for Computational Science (1)
- CSC 322 - Data Management for Computational Science (2)
- PHY 304 - Modern Physics (4)
- 
- **PROJECT:** *(Choose at least 3 units)*

- HON 498 - Honors Project I **(2) and**
- HON 499 - Honors Project II **(1)**
- OR
- MTH 495 - Service Learning in Mathematics **(3)**
- OR
- CSC 495 - Service Learning in Computer Science **(3)**

## **Minor Total for Mathematics Majors: 32**

## **Physics Minor**

### Requirements

- PHY 241 - University Physics I (GE) **(4)**
- PHY 242 - University Physics II **(4)**
- PHY 304 - Modern Physics **(4)**
- Eight additional upper-division units in Physics or Engineering.

Minor Total: 20 Units

## **Department of Psychology**

### **Purposes**

- To develop mature personalities in students, so they will be able to meet problems of adjustment with realism and intelligence;
- To integrate the religious faith of students with the study of psychology;
- To prepare students who plan to undertake graduate study in psychology for careers related to mental health, such as marriage and family counseling, clinical psychology, community psychology, and health psychology;
- To educate students preparing for careers in non-mental health/related fields, such as ministry, business, medicine, and law.

### **Tradition of Excellence**

The Department of Psychology at Point Loma Nazarene University emphasizes several features in striving for excellence in undergraduate education. The Department's practicum program allows juniors and seniors to obtain training in specific psychological skills through a community mental health or social service agency. Supervised by an agency representative and a psychology professor, this program is an effective way for Psychology majors to complement course work with real world experience. Point Loma also offers classes designed to deal with the integration of psychology and the Christian faith. Additionally, select students join with faculty to conduct research that may be presented at a national or regional psychology conference. The Department also maintains an active PsiChi organization (The International Honor Society in Psychology) that sponsors presentations in the field, preparatory workshops for those interested in graduate school, and special social events.

### **Career Opportunities**

It is the goal of the faculty that all students desiring to pursue graduate studies be prepared to do so and to present a strong graduate application. Such an application results from a Department that emphasizes areas foundational to entrance and success in graduate school. In addition to strong academic achievement, these areas include practicum experience, research experience, and sufficient contact with faculty that allows a student to earn a credible letter of recommendation. Recent alumni surveys indicate that over one-half of PLNU Psychology majors eventually receive a graduate degree of some kind, with one-third of those receiving a degree one to three years after graduating from PLNU. When these graduates were asked about their level of satisfaction with the preparation received at Point Loma, over ninety-five percent reported that they were very satisfied or satisfied. There is a strong tradition of excellence in the Department of Psychology at PLNU that attempts to prepare students for their next step into the future.

## **Faculty**

Max Butterfield, Ph.D.  
*Texas Christian University*

G. Michael Leffel, Ph.D.  
*University of Illinois, Champaign-Urbana*

Kendra L. Oakes Mueller, Ph.D.  
*Fuller Theological Seminary, Graduate School of Psychology*

Ross A. Oakes Mueller, Ph.D., Chair  
*Fuller Theological Seminary, Graduate School of Psychology*

Joel T. Sagawa, Ph.D.  
*Fuller Theological Seminary*

Kim W. Schaeffer, Ph.D.  
*University of Oklahoma Health Sciences Center*

John T. Wu, Ed.D.  
*Harvard University, School of Education*

## **Major**

### **Psychology, B.A.**

#### **Program Learning Outcomes**

*Students who complete the program in Psychology will be able to:*

1. Identify basic tenets of psychology.
2. Summarize and apply facets of "The Good Life" as conceptualized in contemporary positive-moral psychology.
3. Display an increase in personal growth and development (for the purpose of serving others).
4. Demonstrate care for others.
5. Understand careers in psychology.

#### **Required Concentrations**

*Choose a concentration from the following:*

Concentration A: Character Morality and Culture  
Concentration B: General Psychology  
Concentration C: Therapeutic and Community Psychology

## Lower-Division Requirements

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) **(3)** *(required of all students who graduated from high school the year prior to enrollment at PLNU)*
- PSY 103 - General Psychology (GE) **(3)**

Total: 6 Units

## Upper-Division Requirements

- PSY 300 - Personality and Adult Development **(4)**
- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**
- PSY 321 - Abnormal Psychology **(3)**
- PSY 390 - Research Methods and Statistics I **(4)**
- PSY 391 - Research Methods and Statistics II **(4)**
- PSY 400 - History and Contemporary Issues in Psychology **(2)**
- PSY 409 - Psychology of Cognition and Learning **(4)**
- PSY 420 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) **(4)**

Total: 29 Units

Core Total: 35 Units

## Required Concentrations

Concentration A: Character, Morality, and Culture Psychology

### Upper-Division Requirements

- PSY 315 - Positive Psychology **(3)**
- PSY 330 - Moral Psychology and Cultural Values **(4)**

One course from the following:

- PSY 410 - Issues in Psychotherapy-Theology Integration **(3)** \*
- PSY 440 - Psychology of Religion **(4)**
- **Plus three (3) units of Psychology electives** *(may also substitute MTH 363 or MTH 383 for Psychology elective).*

Total: 13-14 Units

Note(s):

*Electives - According to individual goals*

*\*If course is selected, must also take PSY 325 (4)*

Recommended

## Concentration B: General Psychology

### Upper-Division Requirements

- **Fifteen units of Psychology electives** (can also substitute either MTH 363 or MTH 383 for Psychology elective).

Concentration Total: 15 Units

Note(s):

*Electives - According to individual goals*

## Concentration C: Therapeutic and Community Psychology

### Upper-Division Requirements

- PSY 301 - Physiological and Neuropsychology (4)
- PSY 325 - Clinical and Community Interventions (4)
- PSY 350 - Clinical and Research Assessment (3)
- PSY 380 - Family Development and Family Therapies (3)
- PSY 410 - Issues in Psychotherapy-Theology Integration (3)

Concentration Total: 17 Units

Recommended

- PSY 315 - Positive Psychology (3)
- PSY 341 - Group Counseling (1-3)
- PSY 345 - Group Dynamics (3) (PSY341 is a pre-requisite)

## Minor

### Computational Science Minor - Psychology (Psychology)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics, or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross-disciplinary teams to solve challenging research problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## **Core Courses for Psychology Emphasis**

### **Lower Division Requirements**

- PSY 103 - General Psychology (GE) (3)
- CSC 143 - Introduction to Computer Programming (3)

### **Upper Division Requirements**

- PSY 320 - Social Psychology (3)
- PSY 301 - Physiological and Neuropsychology (4) **or**
- PSY 409 - Psychology of Cognition and Learning (4)
- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 311 - R for Computational Science (1)
- 
- **Project:** (*choose at least 3 units*)
- HON 498 - Honors Project I (2) **and**
- HON 499 - Honors Project II (1)
- OR
- MTH 495 - Service Learning in Mathematics (3)
- OR
- CSC 495 - Service Learning in Computer Science (3)

### **Psychology Majors - Required Courses**

- MTH 144 - Calculus With Applications (GE) (4)
- CSC 322 - Data Management for Computational Science (2)
- MTH 363 - Calculus Based Statistics With R (3)

### **Minor Total for Psychology Majors: 28**

### **Computer Science Majors - Required Courses**

- MTH 164 - Calculus I (GE) (4)
- ISS 414 - Data Base Systems and Web Integration (4)
-

- MTH 363 - Calculus Based Statistics With R **(3) OR**
- MTH 383 - Mathematical Probability and Statistics **(3)**

### **Minor Total for Computer Science Majors: 30**

### **Mathematics Majors - Required Courses**

- MTH 164 - Calculus I (GE) **(4)**
- CSC 322 - Data Management for Computational Science **(2)**
- MTH 383 - Mathematical Probability and Statistics **(3)**

### **Minor Total for Mathematics Majors: 28**

### **Pre-Therapeutic Psychology Minor**

This minor is for non-Psychology majors who desire an introductory exposure to therapeutic psychology. It is especially suited for individuals who plan to enter careers in social services, i.e. ministry, nursing, medicine, or social work. Students minoring in this program complete the following courses.

#### **Requirements**

- PSY 321 - Abnormal Psychology **(3)**

#### **One course from the following:**

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) **(3)**
- PSY 103 - General Psychology (GE) **(3)**

#### **One course from the following:**

- PSY 325 - Clinical and Community Interventions **(4)**
- PSY 380 - Family Development and Family Therapies **(3)**

#### **One course from the following:**

- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**
- FCS 150 - Human Development **(3)**

#### **Three units from the following:**

- PSY 315 - Positive Psychology **(3)**
- PSY 320 - Social Psychology **(3)**
- PSY 341 - Group Counseling **(1-3)** (Must be taken for 3 units)
- PSY 345 - Group Dynamics **(3)** (PSY341 is a pre-requisite)
- PSY 349 - Intimate Couples **(3)** (Must take with fiance or spouse)

- PSY 360 - Human Sexuality (3)

One course from the following:

- PSY 410 - Issues in Psychotherapy-Theology Integration (3)
- PSY 420 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) (4)

Minor Total: 18-21

## **Department of Sociology, Social Work, and Family Sciences**

### **Mission Statement**

As followers of Christ, our mission is to nurture servant scholars who critically and empirically evaluate social systems, cultural patterns, and basic human needs to constructively engage as agents of hope with individuals, families, and communities.

### **Purposes**

- To provide students with understanding of social environments and patterns of human behavior.
- To help students understand themselves and others in the context of local, national and global societies through the comparison of societies and cultures.
- To prepare students to work with many populations and issues in a variety of settings in the United States and elsewhere in the world.
- To provide students with the tools for study and analysis of the structure and functioning of social groups, social institutions, and societies.
- To provide students with an understanding of the multiple factors that influence the development and quality of life of individuals, families, and communities throughout the lifespan.
- To provide students with the ability to identify appropriate resources to use in application for problem solving.
- To provide students with the ability to analyze research data or original published works and use critical thinking skills for evaluating products, research, or theories.
- To provide students with the ability to examine the value of societal diversity and ethical treatment of others as a result of their Christian faith.
- To provide professional education for employment in the criminal justice systems and generalist social work practice, dietetics, nutrition, food, child development, adolescent development, and the foundation for post-graduate study.

### **Tradition of Excellence**

- A major in Child and Adolescent Development prepares the graduate with an optimal interactive environment to study and learn about the ways children grow and form relationships on a physical, emotional, social, and intellectual scale. Combining real-world coursework with professional preparedness enables the graduate to confidently step into a graduate program or a career serving children and families.
- A major in Dietetics prepares the graduate in understanding science, engaging in a healthy lifestyle, and interacting with people. Graduates will learn how to evaluate patients' nutritional and health needs, and hone the ability to prevent and treat many types of conditions and diseases. Guidance and resources will be given

to successfully pursue becoming a registered dietitian.

- A major in Nutrition and Food prepares the graduate to serve people and gain in-depth knowledge to promote healthy lifestyle choices. The graduate will understand with global awareness how decisions around food directly affect health and well-being and be trained to master skills in food source analysis, food evaluation, food selection, and the relationship of food to nutrition and health.
- A concentration in Food Service Management builds upon the core Nutrition and Food curriculum and prepares the graduate in learning what it takes to manage a restaurant, oversee food service operations, comply with health codes, and interact with customers.
- A concentration in Nutrition and Health builds upon the core Nutrition and Food curriculum and prepares the graduate by studying the social impact of the food we eat, including how it affects our economy, psychology, and culture.
- A major in Sociology is foundational for the understanding of human society and social behavior. The graduate in Sociology is equipped for many ministry, corporate, and human service positions, in addition to being prepared for post-graduate study in Sociology, which can lead to positions in higher education, research, business, government, and law.
- A concentration in Criminal Justice builds upon the core Sociology curriculum and prepares the graduate for positions in all components of the criminal justice system, including law enforcement, courts, and corrections. The graduate is prepared for postgraduate study in Criminal Justice, Sociology, law, and other fields.
- A major in Social Work prepares the graduate for entry into professional social work in a generalist practice. The Social Work graduate is prepared for post-graduate work in the profession.
- A minor in Child Development as a complement to other disciplines.
- A minor in Criminal Justice as a complement to other disciplines.
- A minor in Nutrition as a complement to other disciplines.
- A minor in Sociology as a complement to other disciplines.

## **Career Opportunities**

The Department of Sociology, Social Work and Family Sciences prepares students to be effective leaders in the work force.

Students are prepared for careers in business, industry, public and private agencies, schools, institutions that provide goods, services, education, and information to individuals, families, and communities.

A number of students were hired while still in internships, and many graduates have secured professional employment during or shortly after completion of their undergraduate study. Popular careers students enter include research design, public relations, human services, probation and criminal justice, social work, social welfare, counseling, health care administration, teachers, school administrators, social service agents, family/adult educators, dietitians, community service agents, nutrition educators, and healthcare specialists and many other rewarding fields.

Many graduates continue their education at the post-graduate level in Sociology, Social Work, Child Life, Child Development, Family Studies, Public Health, Nutrition Education, Dietetics, Psychology, Education, and law. Students have entered schools such as the University of California-Berkeley, University of Chicago, University of Colorado, Duke University, University of Southern California, San Diego State University, Loma Linda University, and the California Western School of Law.

## **Faculty**

Susan DeCristofaro Rogers, M.A., Co-Chair  
*Point Loma Nazarene University*  
Academic Director-Early Childhood Learning Center

James Gates, Ph.D.  
*University of Florida*

Brittany Johnson, R.D.N.  
*Loma Linda University*

Patricia Leslie, Ph.D., Director of Social Work  
*Loma Linda University*

Kevin Modesto, Ph.D., Co-Chair  
*University of North Carolina, Chapel Hill*

Cindy Swann, M.S., R.D.  
*San Diego State University*  
Director of Dietetics

Jimiliz Valiente-Neighbours, Ph.D.  
*University of California, Santa Cruz*

## **Major**

### **Child and Adolescent Development, B.A.**

#### **Program Learning Outcomes**

**Students who complete the program in Child and Adolescent Development will be able to:**

1. Identify and describe normative similarities and differences of cognitive, emotional, social and physical theories at each developmental stage from prenatal through adulthood.
2. Illustrate how children's play facilitates integration of cognitive, social, physical, and emotional development.
3. Evaluate the effects of family systems on the development of children and adolescents.
4. Identify and discuss scientific research in understanding different philosophical views of growth and development, both historical and current.
5. Analyze what are developmentally appropriate concepts, activities, materials, and resources as related to infant through adolescent development.
6. Assess research of theoretical and appropriate practical elements of parenting to facilitate decisions for a healthy environment for children and adolescents.
7. Describe the adult-child dynamics and processes essential for building strengths of character and competence in children and adolescents.

8. Examine hereditary, cultural, and environmental factors inherent in ways children and adolescents develop physically, cognitively, morally, socially, and emotionally.
9. Evaluate the effects of society and culture upon the family microsystems, family types, and the subsequent macro systems with which they co-exist.
10. Identify career paths within the child and adolescent professions.

## Lower-Division Requirements

- FCS 101 - Introduction to Family and Consumer Sciences **(1)**
- FCS 120 - Child and Adolescent Development **(4)**
- FCS 150 - Human Development **(3)**
- FCS 203 - Infant and Toddler Development **(3)**
- FCS 230 - Personal and Consumer Financial Management **(2)**

Total: 13 Units

## Upper-Division Requirements

- FCS 305 - Life Cycle Nutrition **(4)**
- FCS 313 - Adolescent Development in the Family Context **(2)**
- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- FCS 355 - Development of Special Needs Children **(3)**
- FCS 385 - Family and Parenting **(2)**
- FCS 420 - Child Development in the Family and Community **(4)**
- FCS 425 - Child and Adolescent Nutrition **(3)**
- FCS 497 - Family and Consumer Sciences Senior Seminar **(2)**
- LIT 325 - Children's Literature **(3)**
- PSY 321 - Abnormal Psychology **(3)**

Select 12 upper-division units from:

- FCS 310 - Early Childhood Education **(4)**
- FCS 460 - Administration and Supervision in Early Childhood Education **(4)**
- FCS 470 - Practicum in Child Development **(3)**
- FCS 475 - Internship in Child Development **(2 or 4)**
- ART 319 - Visual Arts in the Classroom I **(3)**
- EDU 302 - Foundations of Education and Learning Theory **(3)**
- EDU 306 - Principles of Language Acquisition **(3)**
- MUE 341 - Music Skills for the Elementary Classroom Teacher **(3)**
- PED 308 - Methods of Teaching Physical Education **(3)**
- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**
- PSY 325 - Clinical and Community Interventions **(4)**
- SOC 360 - Race and Ethnicity **(3)**
- SWK 340 - Child Welfare **(3)**

Total: 41 Units

Major Total: 54 Units

Note(s):

**Students must be fingerprinted through community care licensing to obtain Child Abuse Central Index Clearance.**

**Students graduating with a Child Development major may qualify for the “Child and Adolescent Development Site Supervisor” permit with the California Commission on Teacher Credentialing.**

## **Dietetics, B.S.**

### Program Learning Outcomes

**Students who complete the program in Dietetics will be able to:**

1. Demonstrate content knowledge of nutrient needs of growth and development on nutrient needs during the lifecycle stages of prenatal through elderly.
2. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
3. Apply content knowledge to disease prevention and treatment, and develop skills in teaching/counseling nutrition knowledge to individuals or groups.
4. Understand the food and food systems foundation through techniques of food preparation and application to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups.
5. Apply knowledge of the physical and biological science foundation as it relates to physiology of the body, nutrient sources, and nutrient function.
6. Utilize principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation necessary for the implementation of food and nutrition services in professional settings.
7. Analyze, interpret, and evaluate current evidence-based research related to nutrition topics.
8. Develop skills at writing science-based papers using analyzed research data as references.
9. Examine cultural differences in food choices and ethics when working with peoples of diverse ethnic, religious, and financial backgrounds.
10. Evaluate the effects of societal, cultural, and financial dynamics upon diet trends, dietary choices, and food preparation methods among families and societies.
11. Identify career paths and access appropriate career plans for identifying professional area of service in dietetics.

### Lower-Division Requirements

- FCS 101 - Introduction to Family and Consumer Sciences (1)
- FCS 110 - Fundamentals of Food (2)
- FCS 150 - Human Development (3)
- FCS 225 - Fundamentals of Nutrition (3)
- FCS 230 - Personal and Consumer Financial Management (2)
- FCS 250 - Introduction to Family and Consumer Sciences Research (1)
- ACC 200 - Principles of Accounting for Non-Business Majors (3)
- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 140 - Human Anatomy and Physiology II (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 220 - Microbiology of Infectious Diseases (4)

- MGT 212 - Principles of Management (3)
- CHE 151 - General Chemistry Tutorial (1)
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 294 - Organic Chemistry I (4)
- MTH 203 - Introduction to Statistics (3)
- PHL 211 - Ethics (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)

Total: 57 Units

## Upper-Division Requirements

- FCS 300 - Food Economics and Management (2)
- FCS 303 - Cultural Foods (2)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- FCS 330 - Community Nutrition (3)
- FCS 331 - Community Nutrition Practicum (1)
- FCS 335 - Nutrition Research Through the Life Cycle (2)
- FCS 365 - Advanced Nutrition (3)
- FCS 414 - Practices in Nutrition Education and Dietary Counseling (2)
- FCS 415 - Medical Nutrition Therapy (3)
- FCS 417 - Medical Nutrition Therapy Practicum (1)
- FCS 435 - Food Service Production and Management (3)
- FCS 455 - Food Science (3)
- FCS 497 - Family and Consumer Sciences Senior Seminar (2)

Total: 30 Units

Major Total: 87

## Recommended Courses

- FCS 305 - Life Cycle Nutrition (4)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)
- MKT 332 - Principles of Marketing (3)
- KIN 340 - Physiology of Exercise (3)

## Additional Information

The major in Dietetics requires 135 units to graduate, seven (7) more than the minimum 128 units required for most majors at PLNU. Students are encouraged to take one or two courses in the summer to lighten their course loads during the regular semester.

Students interested in becoming a Registered Dietitian should consult the Accreditation Council for Education in Nutrition and Dietetics (ACEND) for specific information: 120 South Riverside Plaza, Suite 2190, Chicago IL 60606-6995, 312-899-5400.

Graduates in the Dietetics major will require further training by applying to an ACEND-accredited internship program in order to complete Commission on Dietetic Registration (CDR) requirements to be a registered dietitian (R.D.).

## Majoring in Dietetics

Graduates in the Dietetics major from PLNU earn a Verification Statement that will allow them to apply to an ACEND-accredited dietetic internship program, the second step to becoming a Registered Dietitian (R.D.)

**To be verified at PLNU, the student must:**

- Earn a "C" or better in all courses for the Dietetics major required for the DPD
- Maintain a GPA of 2.800 or higher
- Earn a B.S. degree (official transcripts, including the one that shows an earned bachelor's degree, must be in the DPD file)
- Participate in community service learning activities during the program, as evidenced in the senior portfolio or in a project
- Demonstrate ethical principles and follow AND's Code of Ethics

## Students with a Bachelor's Degree from Another University Seeking a Verification Statement

If a student has earned a bachelor's degree from another university, and is seeking a Verification Statement for the Dietetics program, the student may choose one of the two following paths:

1. Apply to PLNU for a Verification Statement in the Dietetics program, with no degree attached (no second bachelor's degree). This pathway requires:
  - a. A bachelor's degree from a college/university in another major
  - b. Official transcripts reviewed by the Director of Dietetics and the undergraduate Director of Admissions
  - c. A minimum 24 units of upper-division Dietetics courses and prerequisites taken at PLNU. (Courses required will be based on previous coursework transferred, and the date that courses were taken)
  - d. Acceptance to PLNU

OR

2. Apply to PLNU for a second Bachelor of Science degree in Dietetics. This pathway requires:
  - a. Official transcripts reviewed by the Director of Dietetics and the undergraduate Director of Admissions
  - b. Coursework and prerequisites required for the Dietetics major
  - c. Coursework to meet all general education requirements at PLNU
  - d. Acceptance to PLNU

## International Students Seeking a Verification Statement

If a student is an International Student seeking a Verification Statement in Dietetics from PLNU, the student must apply to the University and submit the following:

- a. All documents including high school and college transcripts translated into English and evaluated by an approved credential evaluation service before being sent to the Admissions Office. The student may contact any credential evaluator approved by the National Association of Credential Evaluators (NACES), such as World Education Services, Inc. (WES), Academic Credentials Evaluation Institute, Inc. (ACEI), and Educational Credential Evaluators, Inc. (ECE).

- b. English proficiency: A 550 paper based TOEFL or 216 computer based TOEFL.
- c. An original notarized copy of an Affidavit of Support (financial statement) submitted by a sponsor or bank, indicating sufficient funds for the educational expenses for one academic year at PLNU. (Point Loma Nazarene is a private university: therefore, tuition is the same for U.S. residents and international students.)
- d. Acceptance to PLNU
- e. A minimum 24 units of upper-division Dietetics courses and prerequisites at PLNU. (Courses required will be based on previous coursework transferred, and the date that courses were taken.)

**To be verified at PLNU, the student must:**

- Earn a “C” or better in all core curriculum DPD classes
- Maintain a GPA of 2.800 or higher
- Take at least 24 units of upper-division DPD classes at PLNU
- Demonstrate ethical principles and follow AND’s Code of Ethics

## **Nutrition and Food, B.A.**

### Concentrations

Food Service Management

Nutrition and Health

### Program Learning Outcomes

**Students who complete the program in Nutrition and Food - Concentration in Food Service Management will be able to:**

1. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
2. Examine the role of business, environment, food, and lifestyle trends to develop food service systems to enhance nutrition and wellness in diverse individuals and groups.
3. Understand the food and food systems foundation and apply to the development, modification, and evaluation of recipes, menus, and food products acceptable to diverse groups.
4. Utilize principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation, necessary for the implementation of food and nutrition services in professional settings.
5. Apply management and business theories and principles to the development, marketing, and delivery of programs and services.
6. Demonstrate effective written and interpersonal communication skills.
7. Examine cultural differences in food choices and ethics when working with food service systems that meet the needs of diverse ethnic, religious, and financial backgrounds.
8. Evaluate the effects of societal, cultural, and financial dynamics upon diet trends, dietary choices and food preparation methods among families and societies.
9. Recognize legal and ethical considerations affecting food service organizations.
10. Identify career paths and assess appropriate career plans for identifying professional areas of service in food service management field.

**Students who complete the program in Nutrition and Food - Concentration in Nutrition and Health will be able to:**

1. Demonstrate content knowledge of nutrient needs on growth and development during the lifecycle stages of prenatal through elderly.
2. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
3. Apply content knowledge and develop skills in teaching/counseling nutrition knowledge to individuals or groups.

4. Understand the food and food systems foundation and apply to the development, modification, and evaluation of recipes, menus, and food products acceptable to diverse groups.
5. Utilize principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation, necessary for the implementation of food and nutrition services in professional settings.
6. Analyze, interpret and evaluate current evidence-based research related to nutrition topics.
7. Examine cultural differences in food choices and ethics when working with peoples of diverse ethnic, religious and financial backgrounds.
8. Evaluate the effects of societal, cultural, and financial dynamics upon diet trends, dietary choices, and food preparation methods among families and societies.
9. Identify career paths and assess appropriate career plans for identifying professional areas of nutrition/health fields.

## Lower-Division Requirements

- FCS 101 - Introduction to Family and Consumer Sciences (1)
- FCS 110 - Fundamentals of Food (2)
- FCS 150 - Human Development (3)
- FCS 225 - Fundamentals of Nutrition (3)
- FCS 230 - Personal and Consumer Financial Management (2)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4)
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- PHL 211 - Ethics (GE) (3)

Total: 19 Units

## Upper-Division Requirements

- FCS 300 - Food Economics and Management (2)
- FCS 303 - Cultural Foods (2)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- FCS 435 - Food Service Production and Management (3)
- FCS 480 - Internship in Family and Consumer Sciences (2 or 4) (2) **Units required**
- FCS 497 - Family and Consumer Sciences Senior Seminar (2)

Total: 14 Units

Core Total: 33 Units

## Concentrations

Choose one required concentration from Food Service Management or Nutrition and Health.

### Food Service Management

#### Lower Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3)

- ECO 102 - Principles of Microeconomics (GE) (3)
- MGT 212 - Principles of Management (3)

Total: 10 Units

### Upper Division Requirements

- FCS 445 - Catering (2)
- MGT 382 - Applied Entrepreneurship (3)
- MKT 332 - Principles of Marketing (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)

Total: 14 Units

Major Total: 57 Units

### Recommended Courses for Food Service Management Concentration:

- BUS 201 - Legal Environment of Business (3)
- BUS 313 - Administrative Communication (3)
- COM 220 - Small Group Communication (3)
- COM 312 - Gender and Communication (WS) (3)
- COM 340 - Organizational Communication (3)
- FCS 250 - Introduction to Family and Consumer Sciences Research (1)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)
- PSY 320 - Social Psychology (3)

### Nutrition and Health

#### Lower Division Requirements

- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 140 - Human Anatomy and Physiology II (4)
- SOC 201 - Cultural Anthropology (GE) (3)

Total: 11 Units

#### Upper Division Requirements

- COM 340 - Organizational Communication (3)
- FCS 305 - Life Cycle Nutrition (4)
- FCS 330 - Community Nutrition (3)
- FCS 331 - Community Nutrition Practicum (1)
- FCS 414 - Practices in Nutrition Education and Dietary Counseling (2)
- PSY 320 - Social Psychology (3)

Total: 16 Units

Major Total: 60 Units

Recommended Courses for Nutrition and Food Concentration:

- FCS 250 - Introduction to Family and Consumer Sciences Research (1)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)
- FCS 445 - Catering (2)
- FCS 490 - Special Studies in Family and Consumer Sciences (1-4)
- PSY 325 - Clinical and Community Interventions (4)
- PSY 345 - Group Dynamics (3)

## **Social Work, B.A.**

The Social Work program prepares students to be leaders in service to the community through generalist practice. A career in Social Work offers a wide range of opportunities, including direct practice in social work with families, individuals or community-based organizations, as well as jobs in research, public relations, human services, probation and criminal justice, social welfare, counseling, or health care administration.

## **Program Learning Outcomes**

**Students who complete the program in Social Work will be able to:**

1. Demonstrate understanding of integrated body of knowledge required of a general practitioner as defined by the Council on Social Work Education.
2. Demonstrate a command of the professional values and ethics required of a general practitioner.
3. Demonstrate competence in the concrete practice of professional skills, especially those skills required by the Council on Social Work Education of a general practitioner.
4. Demonstrate an awareness of the influence of Christian and Wesleyan perspectives on social work practice.
5. Demonstrate preparation to transition to careers and/or graduate education in social work.

*All classes required for the major must be completed with a grade of "C" (2.000) or above.*

## **Lower-Division Requirements**

- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 250 - Sociology of the Family (3)
- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 101L - Human Biology and Bioethics Laboratory (GE) (1)
- ECO 102 - Principles of Microeconomics (GE) (3)
- MTH 203 - Introduction to Statistics (3)
- PSY 103 - General Psychology (GE) (3)

Total: 19 Units

## **Upper-Division Requirements**

- SWK 303 - Introduction to Social Work (3)

- SWK 330 - Social Welfare Policy (3)
- SWK 340 - Child Welfare (3) **OR**
- SOC 316 - Sociology of Aging (3)
- SWK 365 - Human Behavior in the Social Environment (3)
- SWK 370 - Social Work Practice I (3)
- SWK 371 - Social Work Practice II (3)
- SWK 470 - Social Work Practicum I (4)
- SWK 471 - Social Work Practicum II (4)
- SWK 472 - Seminar in Social Work I (2)
- SWK 473 - Seminar in Social Work II (2)
- SOC 360 - Race and Ethnicity (3)
- SOC 460 - Social Research Methods and Design (4)

Total: 37 Units

### Recommended Electives

- SOC 103 - Social Problems (GE) (3)
- SOC 305 - Social Stratification (3)
- SOC 330 - The Development of Feminist Thought (WS) (4)
- FCS 150 - Human Development (3)
- PSY 321 - Abnormal Psychology (3)
- PSY 300 - Personality and Adult Development (4)

## Sociology, B.A.

### Concentrations

General Sociology  
Criminal Justice

### Program Learning Outcomes

**Students who complete the program in Sociology will be able to:**

1. Understand society and social behavior in groups and society.
2. Develop competency in social research and social analysis.
3. Demonstrate preparation for post-graduate education.
4. Demonstrate preparation for employment.

**All classes required for the major must be completed with a grade of “C” (2.000) or above.**

### Lower-Division Requirements

- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 260 - Sociological Analysis (3)

- MTH 203 - Introduction to Statistics **(3)**

Select one of the following:

- SOC 103 - Social Problems (GE) **(3)**
- SOC 201 - Cultural Anthropology (GE) **(3)**
- SOC 250 - Sociology of the Family **(3)**

Total: 12 Units

## Upper-Division Requirements

- SOC 415 - Social Theory **(3)**
- SOC 460 - Social Research Methods and Design **(4)**
- SOC 476 - Senior Seminar in Sociology **(3)**

## Concentrations

### General Sociology

Select 18 units from the following:

- SOC 303 - Urban Issues **(3)**
- SOC 305 - Social Stratification **(3)**
- SOC 310 - Criminology **(3)** **OR**
- SOC 314 - Juvenile Delinquency **(3)**
- SOC 316 - Sociology of Aging **(3)**
- SOC 320 - Social Psychology **(3)**
- SOC 321 - Justice, Politics, and the Social World **(3)**
- SOC 330 - The Development of Feminist Thought (WS) **(4)**
- SOC 350 - Urban Sociology **(3)**
- SOC 360 - Race and Ethnicity **(3)**
- SOC 375 - African Cultures and Histories **(3)**
- SOC 420 - Social Change **(3)**
- SOC 430 - Sociology of Religion **(3)**
- SOC 444 - Globalization and Culture **(3)**
- SOC 470 - Medical Sociology **(3)**
- SOC 471 - Internship in Sociology **(2-4)**
- SOC 475 - Sociology of Education **(3)**
- SOC 490 - Special Topics in Sociology **(1-4)**
- SOC 491 - Independent Studies in Sociology **(1-4)**
- A minimum of six additional units of upper-division courses from the following disciplines: Economics, History, Political Science, Psychology, Sociology, and Social Work.

Total: 34 Units

Total Major: 46 Units

## Criminal Justice

### Program Learning Outcomes

**Students who complete the program in Criminal Justice will be able to:**

1. Demonstrate comprehension of the theoretical and legal foundations of criminal justice.
2. Demonstrate knowledge of each of the components of the criminal justice system: the historical background, structure, function, and purpose.
3. Demonstrate understanding and appreciation of the social realities, discrimination, and conflicts in the criminal justice system resulting from racial, socio-economic, and cultural inequities.
4. Demonstrate ethical and professional behavior, and apply critical thinking and problem-solving skills, in an approved internship setting.

**All classes required for the major must be completed with a grade of "C" (2.000) or above.**

### Lower-Division Requirements

- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 209 - Introduction to Criminal Justice (3)
- POL 165 - American Government (4)
- MTH 203 - Introduction to Statistics (3)

Total: 13 Units

### Upper-Division Requirements

- SOC 310 - Criminology (3)
- SOC 360 - Race and Ethnicity (3)
- SOC 409 - Criminal Law (3)
- SOC 410 - Constitutional Foundations of Criminal Justice (3)
- SOC 415 - Social Theory (3)
- SOC 460 - Social Research Methods and Design (4)
- SOC 472 - Internship in Criminal Justice (2-4) **4 Units required**
- SOC 476 - Senior Seminar in Sociology (3)
- PSY 321 - Abnormal Psychology (3)

Total: 29 Units

### Recommended Electives

- SOC 103 - Social Problems (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)

- SOC 250 - Sociology of the Family (3)
- SOC 305 - Social Stratification (3)
- SOC 314 - Juvenile Delinquency (3)
- SOC 320 - Social Psychology (3)
- SOC 350 - Urban Sociology (3)
- SOC 420 - Social Change (3)
- SOC 470 - Medical Sociology (3)

Total Major Units: 48

## **Minor**

### **Child Development Minor**

This minor is for students who desire an introductory exposure to the study of child development. It will also meet the requirements for the Associate Teacher Permit needed for teachers in Early Childhood.

A minimum of 18-20 units are required for this minor, including the following lower and upper-division courses.

### **Requirements**

- FCS 120 - Child and Adolescent Development (4)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- FCS 355 - Development of Special Needs Children (3)
- FCS 385 - Family and Parenting (2)
- FCS 420 - Child Development in the Family and Community (4)

Total: 16 Units

Take one (1) additional course from the following:

- FCS 203 - Infant and Toddler Development (3)
- FCS 305 - Life Cycle Nutrition (4)
- FCS 310 - Early Childhood Education (4)
- FCS 313 - Adolescent Development in the Family Context (2)

Total: 2-4 Units

Minor Total: 18-20 Units

### **Criminal Justice Minor**

The minor in Criminal Justice consists of five required courses and one additional course.

**All classes required for the minor must be completed with a grade of "C" (2.000) or above.**

## Program Learning Outcomes

Students who complete the program in Criminal Justice will be able to:

- Demonstrate comprehension of the theoretical and legal foundations of criminal justice
- Demonstrate knowledge of each of the components of the criminal justice system: the historical background, structure, function, and purpose.
- Demonstrate understanding and appreciation of the social realities, discriminations, and conflicts in the criminal justice system resulting from racial, socio-economic, and cultural inequities.
- Demonstrate ethical and professional behavior and apply critical thinking and problem-solving skills in an approved internship setting.

## Lower-Division Requirements

- SOC 101 - Introduction to Sociology (GE) (3)
- SOC 209 - Introduction to Criminal Justice (3)

## Upper-Division Requirements

- SOC 310 - Criminology (3) **OR**
- SOC 314 - Juvenile Delinquency (3)
  
- SOC 360 - Race and Ethnicity (3)
  
- SOC 409 - Criminal Law (3) **OR**
- SOC 410 - Constitutional Foundations of Criminal Justice (3)

One of the following courses (3-4 units):

- SOC 305 - Social Stratification (3)
- SOC 320 - Social Psychology (3)
- SOC 350 - Urban Sociology (3)
- SOC 472 - Internship in Criminal Justice (2-4) **4 Units required**
- PSY 321 - Abnormal Psychology (3)

**Total: 18-19 Units**

## **Nutrition Minor**

The minor in Nutrition is for students interested in the field of nutrition and well-being. The program consists of a foundation in food, nutrition and disease prevention as it relates to one's health.

Twenty to twenty-one (20-21) units are required for this minor, including the following lower and upper-division courses:

## Lower-Division Requirements

- FCS 110 - Fundamentals of Food (2)
- FCS 150 - Human Development (3)
- FCS 225 - Fundamentals of Nutrition (3)

Total: 8 Units

### Upper-Division Requirements

- FCS 300 - Food Economics and Management (2)
- FCS 303 - Cultural Foods (2)
- FCS 305 - Life Cycle Nutrition (4)
- FCS 340 - Nutrition in Women's Wellbeing (WS) (2)

Take one (1) additional course from the following:

- FCS 315 - Personal, Family, and Community Health (GE) (3)
- FCS 425 - Child and Adolescent Nutrition (3)
- FCS 435 - Food Service Production and Management (3)
- FCS 445 - Catering (2)

Total: 12-13 Units

Minor Total: 20-21 Units

### Sociology Minor

The Sociology minor consists of a minimum of six courses from the list below (three from the required core and three electives). The student must select a minimum of 12 units of upper-division credits in Sociology and may include no more than three units of SOC 490 - Special Topics in Sociology.

**All classes required for the minor must be completed with a grade of "C" (2.000) or better.**

### Lower-Division Requirements

- SOC 101 - Introduction to Sociology (GE) (3)

### Upper-Division Requirements

- SOC 415 - Social Theory (3)
- SOC 260 - Sociological Analysis (3) \* **OR**
- SOC 460 - Social Research Methods and Design (4) \*

Note(s):

\*Students who have completed a research methods course for their major--HIS 270, NSG 399, POL 270, PSY 390 and PSY 391--may substitute for SOC 260 or SOC 460.

Select at least 9 units from the following:

- SOC 303 - Urban Issues (3)
- SOC 305 - Social Stratification (3)
  
- SOC 310 - Criminology (3) **OR**
- SOC 314 - Juvenile Delinquency (3)
  
- SOC 316 - Sociology of Aging (3)
- SOC 320 - Social Psychology (3)
- SOC 330 - The Development of Feminist Thought (WS) (4)
- SOC 350 - Urban Sociology (3)
- SOC 360 - Race and Ethnicity (3)
- SOC 375 - African Cultures and Histories (3)
- SOC 420 - Social Change (3)
- SOC 430 - Sociology of Religion (3)
- SOC 444 - Globalization and Culture (3)
- SOC 470 - Medical Sociology (3)
- SOC 475 - Sociology of Education (3)
- SOC 490 - Special Topics in Sociology (1-4) \*\*

Note(s):

\*\*No more than three units of SOC 490 may count toward the 12 units of upper-division course work required for the minor.

Total: 18-19 Units

### Recommended Courses

- SOC 103 - Social Problems (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)
- SOC 250 - Sociology of the Family (3)

## Fermanian School of Business

### Mission

Provide the World Business Leaders with Christ-Like Character.

### Purposes

- To provide challenging courses that prepare graduates to meet the demands of the competitive business world and graduate school;

- To surround and assist students in spiritual development, by encouraging the utilization of strong Christian values, and applying those values to ethical issues in each topic of study;
- To enhance education with opportunities for students to experience the business world firsthand, and to meet and network with business leaders of exemplary integrity and experience.

## **Tradition of Excellence**

The Fermanian School of Business educates students broadly in preparation for multiple careers and a wide variety of jobs. Christian values and ethical conduct are emphasized throughout the program, which also provides balance between theory and practice, emphasizes the global dimensions of business and encourages cross-cultural experiences. Small classes provide students with individualized attention from faculty who are dedicated to the academic success of each student.

## **Career Opportunities**

The Fermanian School of Business, in partnership with the PLNU Offices of Strengths and Vocation, facilitates interaction between students and business professionals through internships, networking and other opportunities. Highly respected organizations, such as Qualcomm, Booz Allen Hamilton, Intuit, Patagonia, Goldman Sachs, General Dynamics, Bank of America, Hurley, ViaSat, Under Armour, Ernst and Young, Deloitte & Touche, and KPMG, have actively recruited and hired graduates of the Fermanian School of Business. In addition, PLNU business students have been successful pursuing graduate degrees in top academic programs.

## **Accreditation**

Point Loma Nazarene University, through its Fermanian School of Business, is accredited by the Accreditation Council for Business Schools and Programs (ACBSP) to offer the following business degrees:

- Accounting, B.S. Business Administration
- Business Administration, B.A.
- Economics, B.S. Business Administration
- Finance, B.S. Business Administration
- Information Systems (Fermanian School of Business), B.S.
- International Development, B.S. Business Administration
- Management, B.S. Business Administration
- Marketing, B.S. Business Administration

## **Faculty**

Senyo Adjibolosoo, Ph.D.  
*Simon Fraser University*

Daniel S. Bothe, M.B.A., Dean  
*University of Southern California*

Matt Boyne, Ed.D.  
*Pepperdine University*

Steven C. Cosentino, CPA, M.B.A.  
*San Diego State University*

Robert C. Gailey, Ph.D.  
*University of San Diego*

Carl T. Hammond III, CPA, M.B.A.  
*San Diego State University*

Rebecca A. Havens, Ph.D.  
*University of California, San Diego*

Kimberly S. Hogelucht, Ph.D.  
*University of San Diego*

Frank Marshall, D.B.A.  
*George Fox University*

José E. Muñoz, Jr., D.B.A.  
*Anderson University*

Jamie M. Ressler, D.B.A.  
*Nova Southeastern University*

Randal P. Schober, Ed.D.  
*West Virginia University*

Bruce A. Schooling, Ph.D.  
*New Mexico State University*

Harry S. Watkins, Ph.D.  
*University of Oregon*

Michael D. Wiese, Ph.D.  
*Loyola University of Chicago*

## **Computer Requirement**

All majors must own a personal notebook computer for their program of study. The notebook computer is required upon entry into ACC 201 - Principles of Financial Accounting. ACC 201 is normally taken in the fall semester of the sophomore year. Specific hardware requirements are available from the Fermanian School of Business Web site.

## **Students Who Transfer or Change to a Business Program**

Students who transfer or change to a business program as juniors or seniors (57 or more units), or students of any class standing who transfer in the lower division economics, accounting, and management course requirements (5 courses) will be required to take 3 units of upper division ACC/BUS/ECO/FIN/MGT/MKT in lieu of the BUS100 course requirement, excluding courses numbered 489 and 491.

## **Major**

### **Accounting, B.S. Business Administration**

#### **Program Learning Outcomes**

Students who complete the program in Accounting will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate in-depth knowledge of accounting and federal tax regulations.
7. Apply accounting knowledge in the preparation and evaluation of financial statements.
8. Apply knowledge in federal tax regulations to evaluate tax positions and planning opportunities.

## Lower Division Requirements

- BUS 100 - Introduction to Business **(3)**
- ECO 101 - Principles of Macroeconomics (GE) **(3)**
- ECO 102 - Principles of Microeconomics (GE) **(3)**
  
- MTH 153 - Mathematical Analysis for Business and Economics **(3)** *Or*
- MTH 173 - Business Calculus (GE) **(3)**
  
- MTH 203 - Introduction to Statistics **(3)**
- BUS 201 - Legal Environment of Business **(3)**
- MGT 212 - Principles of Management **(3)**
- ACC 201 - Principles of Financial Accounting **(4)**
- ACC 202 - Principles of Managerial Accounting **(3)**

Lower Division Units: 28

## Upper Division Requirements

- ACC 370 - Intermediate Accounting I **(3)**
- ACC 371 - Intermediate Accounting II **(3)**
- ACC 375 - Managerial Cost Accounting **(3)**
- ACC 410 - Federal Tax Accounting I **(3)**
- ACC 411 - Federal Tax Accounting II **(3)**
- ACC 421 - Advanced Accounting **(3)**
- ACC 425 - Financial Statement Analysis and Valuation **(3)**
- ACC 460 - Auditing **(3)**
- BUS 313 - Administrative Communication **(3)**
- BUS 480 - International Business **(3)**
- BUS 489 - Internship in Business **(1-3) 3 units required (3)**  
Accounting majors may substitute ACC 489 Internship in Accounting for BUS 489 Internship in Business in the core (3 total units required).
- FIN 335 - Business Finance **(3)**
- MGT 488 - Strategic Management **(3)**
- MGT 488L - Strategic Management Lab **(0)**
- MKT 332 - Principles of Marketing **(3)**

Total: 42 Units

Major Total: 70 Units

## Recommended

- Cross-cultural experience
- MTH 173 - Business Calculus (GE) (3)
- ACC 350 - Ethics in Accounting (3)
- PHL 211 - Ethics (GE) (3)

## Note(s):

- ECO101 or ECO102 fulfills general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills general education Philosophy Requirement.

## Lower Division Requirements

### **Business Administration, B.A.**

## Program Learning Outcomes

Students who complete the program in Business Administration will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.

## Lower-Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)
- BUS 100 - Introduction to Business (3)
- BUS 201 - Legal Environment of Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- MTH 153 - Mathematical Analysis for Business and Economics (3) **Or**
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)
- MGT 212 - Principles of Management (3)

Total: 28 Units

## Upper-Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) 3 Units required
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

### Upper-Division Electives

- Choose 3 units of upper-division elective in Accounting, Business, Finance, Management, or Marketing other than any upper division requirements listed above. (ACC/BUS/FIN/MGT/MKT 300-490) (3)
- Choose an additional 3 units of upper-division elective specifically from the Economics group (ECO300-490) (3)

Total: 24 Units

Major Total: 52 Units

### Recommended

- Cross-cultural experience
- PHL 211 - Ethics (GE) (3)

### Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## Economics, B.S. Business Administration

### Program Learning Outcomes

Students who complete the program in Economics will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate in-depth knowledge of economic theory in microeconomics, macroeconomics and econometrics.
7. Critically evaluate decisions using tools of economic analysis.
8. Analyze the effectiveness of economic policies to solve national and/or global economic issues.

### Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 28 Units

### Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required**
- ECO 310 - Intermediate Microeconomics (3)
- ECO 330 - Intermediate Macroeconomics (3)
- ECO 460 - Applied Econometrics (3)
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Choose 3 Courses From:

- ECO 315 - Theories of Economic Development (3)
- ECO 380 - Money and Banking (3)
- ECO 410 - International Economics (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- ECO 450 - History of Economic Thought (3)
- ECO 490 - Special Studies in Economics (3)

Total: 36 Units

Major Total: 64 Units

### Recommended

- Cross-cultural experience
- PHL 211 - Ethics (GE) (3)

Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## Finance, B.S. Business Administration

### Program Learning Outcomes

Students who complete the program in Finance will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate an in-depth knowledge of financial management, investment and international finance theories.
7. Apply finance theories and tools in the analysis of business issues.

### Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
- MTH 153 - Mathematical Analysis for Business and Economics (3) *Or*
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 28 Units

### Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required (3)**
- FIN 335 - Business Finance (3)
- FIN 385 - Intermediate Finance (3)
- FIN 415 - Investments (3)
- FIN 425 - Financial Statement Analysis and Valuation (3)
- FIN 435 - International Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)

- MKT 332 - Principles of Marketing (3)

Choose One Elective From the Following Upper Division BUS/ECO Courses:

- BUS 340 - Real Estate Principles and Practices (3)
- ECO 310 - Intermediate Microeconomics (3)
- ECO 380 - Money and Banking (3)

Choose One Elective From the Following Upper Division ACC Courses:

- ACC 370 - Intermediate Accounting I (3)
- ACC 375 - Managerial Cost Accounting (3)
- ACC 410 - Federal Tax Accounting I (3)

Total: 36 Units

Major Total: 64 Units

Recommended

Cross-cultural experience

- PHL 211 - Ethics (GE) (3)
- MTH 173 - Business Calculus (GE) (3)

Note(s):

- ECO101 or ECO102 fulfills general education Social World Requirement.
- PHL211 fulfills general education Philosophy Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.

## **Information Systems (Fermanian School of Business), B.S.**

### **Program Learning Outcomes**

Students who complete the program in Information Systems will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
  - a. *Students will be able to speak about their work with precision, clarity and organization*
  - b. *Students will be able to write about their work with precision, clarity and organization*
  - c. *Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.*
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Write correct and robust software.
7. Analyze the interaction between hardware and software.

8. Apply critical thinking, technical and information systems knowledge to solve problems.
9. Understand and create arguments supported by quantitative evidence.
10. Demonstrate knowledge of information systems and be prepared for careers that use information systems, and graduate study in fields related to information systems.

## Lower Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)
- BUS 100 - Introduction to Business (3)
- BUS 201 - Legal Environment of Business (3)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)
- ECO 100 - Survey of Economics (GE) (3)
- MGT 212 - Principles of Management (3)
- MTH 173 - Business Calculus (GE) (3)
- MTH 203 - Introduction to Statistics (3)

Total: 34 Units

## Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- CSC 314 - Operating Systems (4)
- ISS 342 - Project Management and Quality Assurance (2)
- ISS 373 - Networking and Security (3)
- ISS 403 - Information and Computer Security (3)
- ISS 414 - Data Base Systems and Web Integration (4)
- ISS 472 - Internship in Information Systems (2)
- ISS 481 - Senior Seminar in Information Systems (1)
- FIN 335 - Business Finance (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Total: 34 Units

Major Total: 68 Units

## Recommended:

- Cross-cultural experience.
- PHL 211 Ethics (GE) (3)
- While not a required class for the major, ISS 324 Software Engineering (4) is recommended.

## Notes:

- MTH144 or MTH164 may substitute for MTH173. MTH144, MTH164 or MTH173 fulfills the General Education Problem Solving requirement.
- ECO101 and ECO102 may substitute for ECO100. ECO100, ECO101 or ECO102 fulfills the General Education Social World requirement.
- PHL211 fulfills the General Education Philosophy requirement.

## **International Development, B.S. Business Administration**

### Program Learning Outcomes

Students who complete the program in International Development will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate an in-depth knowledge of International Development theories and concepts.
7. Compare and contrast approaches to decision making in for-profit and non-profit environments.
8. Evaluate the similarities and differences of the economic conditions between developed and developing countries.

### Lower Division Requirements

- BUS 100 - Introduction to Business **(3)**
- ECO 101 - Principles of Macroeconomics (GE) **(3)**
- ECO 102 - Principles of Microeconomics (GE) **(3)**
  
- MTH 153 - Mathematical Analysis for Business and Economics **(3)** *Or*
- MTH 173 - Business Calculus (GE) **(3)**
  
- MTH 203 - Introduction to Statistics **(3)**
- BUS 201 - Legal Environment of Business **(3)**
- MGT 212 - Principles of Management **(3)**
- ACC 201 - Principles of Financial Accounting **(4)**
- ACC 202 - Principles of Managerial Accounting **(3)**

**Total: 28 Units**

### Upper Division Requirements

- BUS 313 - Administrative Communication **(3)**
- BUS 475 - Sustainability in Action **(3)**
- BUS 480 - International Business **(3)**

- BUS 489 - Internship in Business **(1-3) 3 units required**
- ECO 315 - Theories of Economic Development **(3)**
- ECO 450 - History of Economic Thought **(3)**
- FIN 335 - Business Finance **(3)**
- MGT 412 - Leadership Theory and Practice **(3)**
- MGT 470 - Nonprofit Organization Management **(3)**
- MGT 488 - Strategic Management **(3)**
- MGT 488L - Strategic Management Lab **(0)**
- MKT 332 - Principles of Marketing **(3)**

Choose One Course From the Following:

- ECO 380 - Money and Banking **(3)**
- ECO 410 - International Economics **(3)**
- ECO 440 - The Economics of Race, Class and Gender (WS) **(3)**
- ECO 460 - Applied Econometrics **(3)**
- ECO 490 - Special Studies in Economics **(3)**
- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- MGT 382 - Applied Entrepreneurship **(3)**
- POL 301 - Transitions to Democracy **(4)**
- POL 370 - Comparative Politics **(4)**
- POL 420 - United States Foreign Policy **(4)**
- POL 435 - Global Governance **(4)**
- SOC 360 - Race and Ethnicity **(3)**
- SOC 444 - Globalization and Culture **(3)**

Total: 36-37 Units

Required Off Campus Program

- **A Fermanian School of Business approved semester or summer study abroad in a developing country or an approved three (3) unit internship in a developing country is required.**

Major Total: 64-65 Units

Recommended

- PHL 211 - Ethics (GE) **(3)**

Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## Management, B.S. Business Administration

This major is diversified with the required choice of a concentration in Entrepreneurship, Global Business, or Nonprofit Management as specified below.

### Program Learning Outcomes

Students who complete the program in Management will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate an in-depth knowledge of management theory.
7. Apply management theories to effectively address challenging business scenarios.

### Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
  
- MTH 153 - Mathematical Analysis for Business and Economics (3) *Or*
- MTH 173 - Business Calculus (GE) (3)
  
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 28 Units

### Upper-Division Requirement

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required**
- FIN 335 - Business Finance (3)
- MGT 320 - Organizational Behavior (3)
- MGT 374 - Human Resource Management (3)
- MGT 484 - Operations Management (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)
- MKT 332 - Principles of Marketing (3)

Choose one (1) course:

- MGT 412 - Leadership Theory and Practice (3)
- MGT 416 - Perspectives on Leadership (3)

## Choose a Required Concentration

### Entrepreneurship

- MGT 381 - Creativity and Innovation (3)
- MGT 382 - Applied Entrepreneurship (3)

### Global Business

**Choose two (2) courses from the following (at least one (1) course must be ECO410 or FIN435):**

- ECO 410 - International Economics (3)
- FIN 435 - International Finance (3)
- POL 370 - Comparative Politics (4)
- POL 435 - Global Governance (4)
- SOC 444 - Globalization and Culture (3)

### Off-Campus Program

Required: approved semester study abroad

### Nonprofit Management

- BUS 475 - Sustainability in Action (3)
- MGT 470 - Nonprofit Organization Management (3)

Total: 36-37 Units

Major Total: 64-65 Units

### Recommended

- PHL 211 - Ethics (GE) (3)

### Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## Marketing, B.S. Business Administration

### Program Learning Outcomes

Students who complete the program in Marketing will be able to :

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Demonstrate in-depth knowledge of marketing theory and concepts.
7. Apply marketing research skills to inform marketing decision making.
8. Develop, analyze, and evaluate strategic and tactical marketing plans and programs, and assess marketing performance.

## Lower Division Requirements

- BUS 100 - Introduction to Business (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)
  
- MTH 153 - Mathematical Analysis for Business and Economics (3) *Or*
- MTH 173 - Business Calculus (GE) (3)
  
- MTH 203 - Introduction to Statistics (3)
- BUS 201 - Legal Environment of Business (3)
- MGT 212 - Principles of Management (3)
- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 28 Units

## Upper Division Requirements

- BUS 313 - Administrative Communication (3)
- BUS 480 - International Business (3)
- BUS 489 - Internship in Business (1-3) **3 units required**
- FIN 335 - Business Finance (3)
- MKT 332 - Principles of Marketing (3)
- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)
- MKT 350 - Social Media and Digital Marketing (3)
- MKT 432 - Marketing Research (3)
- MKT 460 - Marketing Strategy (3)
- MGT 488 - Strategic Management (3)
- MGT 488L - Strategic Management Lab (0)

Total: 36 Units

Major Total: 64 Units

## Recommended

Cross-cultural experience

- PHL 211 - Ethics (GE) (3)

Note(s):

- ECO101 or ECO102 fulfills the general education Social World Requirement.
- MTH173 fulfills general education Problem Solving Requirement, but MTH153 does not.
- PHL211 fulfills the general education Philosophy Requirement.

## Minor

### Accounting Minor

A minor in Accounting is for students who are interested in an understanding of accounting principles and techniques, but who do not want to pursue a major in Accounting.

#### Lower-Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- ACC 202 - Principles of Managerial Accounting (3)

Total: 7 Units

#### Upper-Division Requirements

- ACC 370 - Intermediate Accounting I (3)
- ACC 371 - Intermediate Accounting II (3)

Two (2) of the following:

- ACC 375 - Managerial Cost Accounting (3)
- ACC 410 - Federal Tax Accounting I (3)
- ACC 421 - Advanced Accounting (3)
- ACC 425 - Financial Statement Analysis and Valuation (3)
- ACC 460 - Auditing (3)

Total: 12 Units

Minor Total: 19 Units

### Business Administration Minor

A minor in Business Administration is for those who wish to complement study in another area with a basic background in business. The minor consists of introductory courses in Economics, Accounting, and upper-division courses designed to acquaint the student with disciplines essential to business success.

## Lower-Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors **(3)**  
\* ACC201 and ACC202 sequence may be substituted for ACC200.
- MGT 212 - Principles of Management **(3)**

One (1) of the following:

- ECO 100 - Survey of Economics (GE) **(3)**
- ECO 101 - Principles of Macroeconomics (GE) **(3)**
- ECO 102 - Principles of Microeconomics (GE) **(3)**

Total: 9 Units

## Upper-Division Requirements

- MKT 332 - Principles of Marketing **(3)**
- Nine units selected from any upper-division course in Business, Accounting, Marketing, Management, Finance or Economics **(9)**

Total: 12 Units

Minor Total: 21 Units

## Computer Technology - Business Minor (Business Majors)

The Computer Technology - Business minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for business students who desire to enter business or accounting careers with a greater knowledge of information and computer technology.

## Lower-Division Requirements

- ACC 201 - Principles of Financial Accounting **(4)**
- CSC 143 - Introduction to Computer Programming **(3)**
- CSC 154 - Objects and Elementary Data Structures **(4)**
- CSC 252 - Data Structures in C++ **(2)**
- MGT 212 - Principles of Management **(3)**

Total: 16 Units

## Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 322 - Data Management for Computational Science (2)
- ISS 342 - Project Management and Quality Assurance (2)
- MKT 332 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 300-499 for three (3) units.**

Total: 12 Units

Minor Total: 28 Units

## **Computer Technology - Marketing Minor (Business Majors)**

The Computer Technology - Marketing minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for marketing students who desire to enter marketing or business careers with a greater knowledge of information and computer technology.

### Lower-Division Requirements

- ACC 201 - Principles of Financial Accounting (4)
- CSC 143 - Introduction to Computer Programming (3)
- CSC 154 - Objects and Elementary Data Structures (4)
- CSC 252 - Data Structures in C++ (2)

Total: 13 Units

### Upper-Division Requirements

- CSC 302 - UNIX and Python Scripting for Computational Science (2)
- CSC 322 - Data Management for Computational Science (2)
- MKT 332 - Principles of Marketing (3)
- **Choose two additional courses from MKT 300-459 for six (6) units.**

Total: 13 Units

Minor Total: 26 Units

## **Finance Minor**

A minor in Finance is for students who are interested in an understanding of finance concepts and applications, but who do not want to pursue a major in Finance.

### Lower-Division Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3)  
\*ACC201 and ACC202 sequence may be substituted for ACC200.

One (1) of the following:

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)

Total: 6 Units

### Upper-Division Requirements

- FIN 335 - Business Finance (3)

Three (3) of the following:

- FIN 385 - Intermediate Finance (3)
- FIN 415 - Investments (3)
- FIN 425 - Financial Statement Analysis and Valuation (3)
- FIN 435 - International Finance (3)

Total: 12 Units

Total Minor: 18 Units

### International Development Minor

A minor in International Development is for students who wish to complement study in another area with a basic background in economic development. Study in this discipline seeks to equip students in other majors to address the issues of material welfare that have an impact on their study of the issues facing disadvantaged populations.

### Lower-Division Requirements

- SOC 201 - Cultural Anthropology (GE) (3) \*

Choose one (1) of the following:

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)

Total: 6 Units

Note(s):

*\*Fulfills the general education Social World requirement .*

## Upper-Division Requirements

- BUS 475 - Sustainability in Action (3)
- ECO 315 - Theories of Economic Development (3)
- MGT 470 - Nonprofit Organization Management (3)

Choose one (1) of the following:

- ECO 380 - Money and Banking (3)
- ECO 410 - International Economics (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- ECO 450 - History of Economic Thought (3)
- ECO 460 - Applied Econometrics (3)
- ECO 490 - Special Studies in Economics (3)
- FCS 315 - Personal, Family, and Community Health (GE) (3)
- MGT 382 - Applied Entrepreneurship (3)
- MGT 412 - Leadership Theory and Practice (3)
- POL 301 - Transitions to Democracy (4)
- POL 370 - Comparative Politics (4)
- POL 420 - United States Foreign Policy (4)
- POL 435 - Global Governance (4)
- SOC 360 - Race and Ethnicity (3)
- SOC 444 - Globalization and Culture (3)

Total: 12-13 Units

Minor Total: 18-19 Units

## Marketing Minor

A minor in Marketing is for students who are interested in an understanding of marketing concepts and applications, but who do not want to pursue a major in marketing.

## Lower Division Requirements

Choose two (2) of the following:

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*\*
- ECO 100 - Survey of Economics (GE) (3) \*  
or ECO 101 (3) Principles of Macroeconomics (GE)\*  
or ECO 102 (3) Principles of Microeconomics (GE)\*
- MGT 212 - Principles of Management (3)

Total: 6 Units

Note(s):

\* Fulfills the general education Social World Requirement.

\*\* The ACC201 and ACC202 sequence may be substituted for ACC200.

### Upper Division Requirements:

- MKT 332 - Principles of Marketing (3)

Choose three (3) of the following:

- MKT 333 - Consumer and Organizational Buying Behavior (3)
- MKT 334 - Professional Selling and Sales Management (3)
- MKT 336 - Integrated Marketing Communications (3)
- MKT 350 - Social Media and Digital Marketing (3)
- MKT 432 - Marketing Research (3)

Total: 12 Units

Total Minor: 18 units

### **Nonprofit Organization Management Minor**

A minor in Nonprofit Organization Management is for students who wish to complement study in another area with a basic background in managing nonprofit organizations. The program is designed to acquaint the student with a few essentials of nonprofit organization management.

### Lower-Division Requirements

Choose two (2) of the following:

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*\*
- ECO 100 - Survey of Economics (GE) (3) \*  
or ECO 101 (3) Principles of Macroeconomics (GE)\*  
or ECO 102 (3) Principles of Microeconomics (GE)\*
- MGT 212 - Principles of Management (3)

Total: 6 Units

Note(s):

\* *Fulfills the general education Social World requirement.*

\*\* *ACC201 and ACC202 sequence may be substituted for ACC200.*

### Upper-Division Requirements

- BUS 475 - Sustainability in Action (3)

- MGT 412 - Leadership Theory and Practice (3)
- MGT 470 - Nonprofit Organization Management (3)

Choose one (1) of the following:

- ECO 315 - Theories of Economic Development (3)
- ECO 440 - The Economics of Race, Class and Gender (WS) (3)
- MGT 320 - Organizational Behavior (3)
- MGT 374 - Human Resource Management (3)
- MGT 382 - Applied Entrepreneurship (3)
- SOC 360 - Race and Ethnicity (3)
- SOC 444 - Globalization and Culture (3)

Total: 12 Units

Minor Total: 18 Units

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, and Modern Languages, and the Department of Communication and Theatre.

### **Requirements**

- MKT 332 - Principles of Marketing (3)
- COM 330 - Persuasion (3)
- COM 390 - Introduction to Public Relations (3)
- COM 405 - Public Relations Cases and Campaigns (3)
- JRN 250 - Introduction to Journalism (3)
- JRN 355 - Public Relations Writing (3)

Minor Total: 18 Units

## **Science Business Minor -Ecology Emphasis**

## **Science Business Minor-Chemistry Emphasis**

## **Science-Business Minor with Chemistry Emphasis**

### **Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)

- CHE 294 - Organic Chemistry I (4)
- MGT 212 - Principles of Management (3)

**Choose one (1) course from the following:**

- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)

**Choose one (1) course from the following:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 28-30 units**

**Upper Division Requirements:**

- MKT 332 - Principles of Marketing (3)
- **Choose three (3) additional courses from BUS or MGT300-499 for nine (9) units.**

**Total: 12 units**

Total Minor: 40-42 units

## Science-Business Minor (Business Majors)

The Science-Business minors, joint minors between the Fermanian School of Business and the Biology and Chemistry Departments, are for business students who are interested in pursuing business careers in innovative science-related industries such as biotechnology, medical device, and pharmaceutical. Three emphases are available:

- Molecular Emphasis
- Ecology Emphasis
- Chemistry Emphasis

## Science-Business Minor with Molecular Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)
- MGT 212 - Principles of Management (3)

**Choose one (1) course from the following:**

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)

**Choose one (1) course from the following:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 22-24 Units**

**Upper Division Requirements:**

- BIO 345 - Genetics (4)
- BIO 352 - Research Methodology (2)
- MKT 332 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 300-499 for three (3) units**

**Choose one (1) course from the following:**

- BIO 315 - Microbiology (3)
- BIO 350 - Advanced Cell Biology (3)
- BIO 380 - Molecular Biology (3)
- BIO 390 - Immunology (3) \*\*
- BIO 400 - Developmental Biology (3) \*\*
- BIO 410 - Vertebrate Biology (3)
- BIO 450 - Advanced Biochemistry (4)

\*\* With Biology department permission, BIO345 may substitute as this course pre-requisite.

**Total: 15 units**

Total Units: 37-39

## Science-Business Minor with Ecology Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)  
(BIO105 may be substituted with the permission of the Biology Department.)
- BIO 212 - Organismal Biology (3)
- MGT 212 - Principles of Management (3)

**Choose one (1) course from the following:**

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)

**Choose one (1) course from the following:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)

- MTH 173 - Business Calculus (GE) (3)

**Total: 21-23 units**

**Upper Division Requirements:**

- BIO 363 - Conservation Ecology (3)
- MKT 332 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 300-499 for three (3) units.**

**Choose two (2) courses from the following:**

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)
- BIO 410 - Vertebrate Biology (3)
- BIO 423 - Advanced Human Physiology (3)
- BIO 430 - Animal Behavior (3)

*The following Environmental Science/Biology courses could be taken at Au Sable or Costa Rica with our sister school (prior permission is required for any substitutions). The following courses can be used to transfer in these units:*

- EVS 396 - Advanced Biology (3)
- EVS 397 - Advanced Ecology (3)
- EVS 398 - Advanced Ecological Applications (3)

**TOTAL: 14-15 units**

Total Units: 35-38

## Science-Business Minor with Chemistry Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)
- MGT 212 - Principles of Management (3)

**Choose one (1) course from the following:**

- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)

**Choose one (1) course from the following:**

- MTH 144 - Calculus With Applications (GE) (4)

- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 28-30 units**

**Upper Division Requirements:**

- MKT 332 - Principles of Marketing (3)
- **Choose three (3) additional courses from BUS or MGT300-499 for nine (9) units.**

**Total: 12 units**

Total Minor: 40-42 units

## Science-Business Minor Molecular Emphasis

### Science-Marketing Minor (Business Majors)

The Science-Marketing minors, joint minors between the Fermanian School of Business and the Biology and Chemistry Departments, are for business students who are interested in pursuing marketing careers in innovative science-related industries such as biotechnology, medical device, and pharmaceutical. Three emphases are available:

- Molecular Emphasis
- Ecology Emphasis
- Chemistry Emphasis

### Science-Marketing Minor with Molecular Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

**Choose one (1) of the following courses:**

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)

**Choose one (1) of the following courses:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 19-21 units**

**Upper Division Requirements:**

- BIO 345 - Genetics (4)

- BIO 352 - Research Methodology (2)
- MKT 332 - Principles of Marketing (3)
- **Choose two (2) additional course from MKT300-459 for six (6) units.**

**Choose one (1) of the following courses:**

- BIO 315 - Microbiology (3)
- BIO 350 - Advanced Cell Biology (3)
- BIO 380 - Molecular Biology (3)
- BIO 390 - Immunology (3) \*\*
- BIO 400 - Developmental Biology (3) \*\*
- BIO 410 - Vertebrate Biology (3)
- BIO 450 - Advanced Biochemistry (4)

\*\* with Biology Department permission, BIO345 may substitute as this course pre-requisite.

**Total: 18 units**

Total Minor: 37-39 units

## Science-Marketing Minor with Ecology Emphasis

**Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)  
(BIO105 may be substituted with the permission of the Biology Department).
- BIO 212 - Organismal Biology (3)

**Choose one (1) of the following courses:**

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)

**Choose one (1) of the following courses:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 18-20 units**

**Upper Division Requirements:**

- BIO 363 - Conservation Ecology (3)
- MKT 332 - Principles of Marketing (3)
- **Choose two (2) additional courses from MKT 300-459 for six (6) units.**

**Choose two (2) of the following courses:**

- BIO 312 - Applied Plant Biology (2)
- BIO 315 - Microbiology (3)
- BIO 323 - Introduction to Oceanography (3)
- BIO 325 - Insect Biology (3)
- BIO 333 - Marine Biology (3)
- BIO 340 - Field Biology: Neotropical Ecology (2)

- BIO 410 - Vertebrate Biology (3)
- BIO 430 - Animal Behavior (3)

*The following Environmental Science/Biology courses could be taken at Au Sable or in Costa Rica with our sister school (prior permission is required for any substitutions). The following courses can be used to transfer in these units:*

- EVS 396 - Advanced Biology (3)
- EVS 397 - Advanced Ecology (3)
- EVS 398 - Advanced Ecological Applications (3)

**Total: 17-18 units**

Total Minor: 35-38 units

## Science-Marketing Minor with Chemistry Emphasis

### **Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- CHE 152 - General Chemistry I (GE) (4)
- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)

### **Choose one (1) from the following courses:**

- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)

### **Choose one (1) from the following courses:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 25-27 units**

### **Upper Division Requirements:**

- MKT 332 - Principles of Marketing (3)
- **Choose three (3) additional courses from MKT300-459 for nine (9) units.**

**Total: 12 units**

Total Minor: 37-39 units

## Science-Marketing Minor Chemistry Emphasis

## Science-Marketing Minor with Chemistry Emphasis

### **Lower Division Requirements:**

- ACC 201 - Principles of Financial Accounting (4)
- CHE 152 - General Chemistry I (GE) (4)

- CHE 153 - General Chemistry II (4)
- CHE 213 - Analytical Chemistry (3)
- CHE 294 - Organic Chemistry I (4)

**Choose one (1) from the following courses:**

- BIO 101 - Human Biology and Bioethics (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)

**Choose one (1) from the following courses:**

- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)
- MTH 173 - Business Calculus (GE) (3)

**Total: 25-27 units**

**Upper Division Requirements:**

- MKT 332 - Principles of Marketing (3)
- **Choose three (3) additional courses from MKT300-459 for nine (9) units.**

**Total: 12 units**

Total Minor: 37-39 units

## **Sustainability Studies Minor**

This Sustainability Studies minor is an interdisciplinary program designed to help students develop a broad perspective on the issues and challenges of creation care and to acquire skills and tools for personally addressing those challenges. The minor consists of introductory courses in Biology, Sociology and/or Personal and Consumer Financial Management, and upper-division courses drawn from Sociology, Theology, Political Science, International Development, and Business, and a Sustainability practicum or internship experience. All of the courses in the minor will significantly address sustainability issues from the perspective of their respective disciplines.

### **Requirements**

Select one (1) course from the following:

- BIO 102 - Environment and People (GE) (4)
- BIO 105 - Ecology and Conservation (GE) (3)

Select one (1) course from the following:

- FCS 230 - Personal and Consumer Financial Management (2)
- SOC 103 - Social Problems (GE) (3)
- SOC 201 - Cultural Anthropology (GE) (3)

Lower Division: 5-7 Units

Each of the following:

- BUS 475 - Sustainability in Action (3)
- THE 306 - The Life of Holiness (GE) (3)

Select Two 2 Course from the following:

- ECO 315 - Theories of Economic Development (3)
- MGT 470 - Nonprofit Organization Management (3)
- POL 360 - Urban Politics (4)
- POL 435 - Global Governance (4)
- POL 441 - Issues in Public Policy (4)
- SOC 444 - Globalization and Culture (3)

Upper Division: 12-14 Units

Internship, Practicum or Research Project

(Minimum of 40 hours work requirement; may be taken for credit)

- An Internship, Practicum or Research Project addressing sustainability (0-4) \*

Minor Total: 17-25 Units

Note(s):

\*The project must be approved by the Sustainability Studies minor advisor. It may consist of an experience (no formal course credit) with a local NGO or business on a sustainability project, or may be a for-credit course drawn from any major's internship, research project or practicum courses.

## Certificate

### Business Certificate

A certificate in Business is for students who are interested in an understanding of basic business (accounting, economics, management, and marketing) concepts and applications, but who do not want to pursue a minor or major in Business Administration.

### Certificate Requirements

- ACC 200 - Principles of Accounting for Non-Business Majors (3) \*  
\*ACC201 and ACC202 sequence may be substituted for ACC200.
- MGT 212 - Principles of Management (3)
- MKT 332 - Principles of Marketing (3)

Select one (1) of the following:

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)

Total:12 Units

## **School of Education**

### **Purposes**

Point Loma Nazarene University's undergraduate School of Education offers two Bachelor's degree of academic rigor in an environment of vital Christianity in the Wesleyan tradition: 1) Cross Disciplinary Studies: Teacher Education and 2) Cross Disciplinary Studies: Integrated Education. Our commitment is to prepare thoughtful, culturally sensitive, scholarly professional educators for a variety of teaching/learning environments who utilize the latest research and exemplary methods to ensure learning and achievement. The faculty is committed to equip candidates to become influential moral and ethical leaders in a highly competitive, diverse, and ever-changing society.

### **Tradition of Excellence**

the undergraduate degree in teacher education includes credential courses approved by the California Commission on Teacher Credentialing leading to the following credentials: Multiple-Subject, Single-Subject, Special Education, and the Clear teaching credential, along with the Administrative Services Credential, the Pupil Personnel Services Credential, Reading and Literacy Added Authorization, and Added Authorizations in Special Education. The teacher education credential programs are offered in San Diego (Mission Valley) and Bakersfield. Because undergraduates may take courses toward the teaching credential, the program described in this section refers only to that aspect of the program. Details of the broader education programs are found in the Catalog for graduate studies. Faculty in the School of Education are practitioners and specialists in teaching pedagogy, counseling and leadership. The School articulates with all other academic departments and schools in the university regarding subject-matter preparation of Single-Subject and Multiple-Subject teacher candidates. While the primary focus of the School of Education is to prepare teachers, the degrees are also of value to those who are interested in professions such as workplace instructors, social work, family advocacy, curriculum developers, religious studies, and early childhood education.

### **Career Opportunities**

The Cross Disciplinary Studies: Teacher Education coursework prepares candidates for success on the California Subject Examinations for Teachers and in a K-12 teaching career. Career options for the Cross-Disciplinary Studies: Integrated Education major are training, instructional design, people management, and workplace instructors outside of the K-12 setting. Throughout the program, methodologies based on current practice and research are modeled and reinforced. The practice and application components of the methods courses are easily facilitated because the School of Education is field-based. Candidates are required to be in classrooms or other professional teaching venues for approximately 100 hours of documented and evaluated observation and participation prior to student teaching.

Admission to the university may be considered Level 1 admission to the School of Education. However, this neither implies nor guarantees approval for student teaching (Level 2 admission). If, in the opinion of the School of Education, a candidate fails to meet acceptable professional and personal standards, the candidate may be disqualified from attempting to complete preparation for a career in education. Candidates desiring to fulfill the requirements of a credential for public school service are advised to declare their intentions as early as possible in their academic careers. For the Multiple-Subject Credential candidate, this decision should be made during the first year of the candidate's enrollment at the university. The Single-Subject Credential candidate should decide no later than the sophomore year. Transfer candidates should consult with the appropriate departmental/school advisor immediately upon matriculation.

All prospective teachers should plan their major requirements and those set forth by the School of Education to establish the proper sequence of courses and the fulfillment of all professional requirements. The Credentialing and Educational Placement Office provides a variety of services: transcript evaluation, credential applications, and career services for the candidate. The credential analyst acts as a liaison between the candidate and the California Commission on Teacher Credentialing.

## **Faculty**

Micki Abercrombie-Donahue, Ed.D.  
*Montana State University*

Conni E. Campbell, Ed.D.  
*University of La Verne*  
Associate Dean for Undergraduate Programs,  
Teacher Performance Assessment, and M.A.T.

Deborah E. Erickson, Ed.D., Dean  
*University of the Pacific*

Grace C. Fantorini, Ed.D.  
*Alliant International University*

Shirlee M. Gibbs, Ed.D.  
*Northern Arizona University*

Robert W. Graeff, Ed.D.  
*Northern Arizona University*

Jill Hamilton-Bunch, Ph.D.  
*University of California, Santa Barbara*  
Associate Dean of Teacher Education and  
Bakersfield Regional Center

James E. Johnson, Ed.D.  
*University of Southern California*

Jennifer L. Kritsch, M.A.  
*Point Loma Nazarene University*

Tricia L. Lauer, Ph.D.  
*University of the Rockies*

Jennifer E. Lineback, Ph.D.  
*University of California, San Diego and San Diego State University*

Enedina Martinez, Ed.D.  
*Northern Arizona University*

Patricia M. Maruca, Ed.D.  
*Northern Arizona University*

Ray O. Posey, Ph.D.  
*Vanderbilt University*

Dione Brooks Taylor, Ed.D.  
*Northern Arizona University*

## Major

### Cross Disciplinary Studies: Integrated Education B.A.

#### Program Learning Outcomes

Cross-Disciplinary Studies: Integrated Education offers a broad interdisciplinary education, grounded in educational theory and practice, utilizing courses from the sciences, the humanities and the professional schools. This degree prepares candidates for a variety of post-graduate professional and academic experiences in workplace training, instructional design, people management and leadership.

Candidates who complete the program in Cross Disciplinary Studies: Integrated Education will be able to do the following:

- Demonstrate effective presentation skills, one-on-one and with groups.
- Produce effective written communication.
- Employ critical thinking and logic to solve problems in a variety of professional environments.
- Demonstrate information literacy by acquiring and utilizing specific content from a variety of sources to plan teaching and learning events.
- Apply an interdisciplinary understanding of content regarding diverse and cross-cultural communities.
- Apply faith-based influences and beliefs within professional/educational settings.
- Reflect on and engage in spiritual growth opportunities in personal and professional settings.
- Serve effectively within their communities.

#### Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Integrated Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 9 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

Reading, Language and Literature  
Visual and Performing Arts  
Physical Education/Health  
Human Development  
Science  
Math  
History and Social Science  
Pre-Business  
Media Communication

#### Lower Division Requirements:

- BIB 101 - Old Testament History and Religion (GE) (2)
- BIB 102 - New Testament History and Religion (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- COM 100 - Principles of Human Communication (GE) (3)
- EXS 201 - Fundamentals of Fitness Assessment and Development (2)
- HIS 110 - World Civilizations I (GE) (3)
- HIS 120 - United States History from Early America to the Twentieth Century (3)

- LIT 200 - Literature and Culture (GE) (2)
- MTH 113 - College Algebra (3)
- MTH 213 - Fundamentals of Elementary Mathematics I (3)
- MTH 223 - Fundamentals of Elementary Mathematics II (3)
- PSC 111 - Physical Science for Teachers (GE) (4)
- PSC 112 - Earth and Space Science for Teachers (3)
- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)
- OR
- PSY 103 - General Psychology (GE) (3)
- TRE 101 - Introduction to Theatre (GE) (2)
- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) (4)
- OR
- WRI 115 - College Composition: Writing - First Year Experience (GE) (3)
- AND
- WRI 116 - College Composition: Research - First Year Experience (GE) (2)

Choose one course from the following three:

- FCS 315 - Personal, Family, and Community Health (GE) (3)
- PED 100 - Fitness Through Movement (GE) (2)
- PED 200 - Optimal Health (GE) (2)

Choose one course from the following two:

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 201 - Cultural Anthropology (GE) (3)

Choose one course from the following five:

- ART 100 - Introduction to Art (GE) (2)
- ART 102 - Fundamentals of Art (GE) (3)
- ART 200 - History of Art I (GE) (3)
- ART 201 - History of Art II (GE) (3)
- MUH 100 - Introduction to Music (GE) (2)

Choose one course from the following two:

- PHL 201 - Introduction to Philosophy (GE) (3)
- PHL 211 - Ethics (GE) (3)

Choose one course from the following four:

- LIT 350 - World Literature (GE) (3)
- LIT 351 - World Cinema (GE) (3)
- LIT 352 - Diverse Voices in American Literature (GE) (3)
- LIT 353 - Women Writers (GE) (3)

Choose one of the following sequences:

- SPA 101 - Elementary Spanish I (GE) (4) AND
- SPA 102 - Elementary Spanish II (GE) (4)
- OR
- FRE 101 - Elementary French I (GE) (4) AND
- FRE 102 - Elementary French II (GE) (4)
- OR
- GER 101 - Elementary German I (GE) (4) AND
- GER 102 - Elementary German II (GE) (4)

## Upper Division Requirements

- COM 365 - Intercultural Communication (3)
- HIS 370 - California History (4)
- LIT 325 - Children's Literature (3)
- SOC 360 - Race and Ethnicity (3)
- MGT 382 - Applied Entrepreneurship (3)
- ECO\*\*\* (3) Consult with EDU department for course options.

Choose one course from the following two:

- ART 325 - Non-Western Art History (3)
- MUH 334 - World Music (2)

Choose one course from the following two:

- CHU 395 - The Christian Tradition (GE) (3)
- THE 306 - The Life of Holiness (GE) (3)

Choose one course from the following two:

*\* LIT351 cannot count in both the major and GE requirement. Choose LIT488 or complete LIT351 plus an additional upper division LIT GE option.*

- LIT 351 - World Cinema (GE) (3)
- LIT 448 - Postcolonial Classics and Theory (3)

Choose one course from the following three:

- MTH 303 - Problem Solving (GE) (3)
- MTH 144 - Calculus With Applications (GE) (4)
- MTH 164 - Calculus I (GE) (4)

Choose one course from the following two:

- PSY 308 - Developmental Psychology – Birth Through Adolescence (4)
- FCS 120 - Child and Adolescent Development (4)

Total: 29 Units

## Integrated Education Upper Division Requirements

- EDU 302 - Foundations of Education and Learning Theory (3)
- EDU 404 - Foundations of Special Education (3)
- EDU 417 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)

Total: 8 Units

### Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Integrated Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 9 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

#### Reading, Language and Literature

##### English Emphasis

- LIT 250 - Introduction to the Study of Literature (3)
  - Linguistics and Writing - one upper division 3 unit course**
  - Literature Survey - one lower division 3 unit course**
  - Literature Survey - one upper division 3 unit course**

##### French Emphasis

- FRE 250 - Intermediate French I (3)
- FRE 251 - Intermediate French II (3)
- FRE 315 - French Culture and Civilization (3)
- FRE 320 - Survey of French Literature (3)

##### Spanish Emphasis

- SPA 251 - Intermediate Spanish II (3)
- SPA 302 - Advanced Grammar and Reading (3)
- SPA 303 - Advanced Conversation and Composition (3)
  - Choose one:
- SPA 310 - Latin American Culture and Civilization (3)
- SPA 315 - Culture and Civilization of Spain (3)
- SPA 320 - Mexican American Literature and Culture (3)
- SPA 380 - Genre/period Studies in Hispanic Literature or Film (3)

#### Visual and Performing Arts

##### Art Emphasis

- ART 319 - Visual Arts in the Classroom I (3)
- TRE 354 - Movement I (3)
  - Choose one:

- ART 104 - Three-Dimensional: Composition and Space Design **(3)**
- ART 115 - Drawing I **(3)**  
Choose one:
- ART 304 - Modern Art History **(3)**
- ART 305 - Contemporary Art History **(3)**
- ART 325 - Non-Western Art History **(3)**
- ART 335 - Design History: Industrial Revolution to Contemporary Design **(3)**

## Music Emphasis

- MUA 212 - Beginning Conducting **(2)**
- MUE 341 - Music Skills for the Elementary Classroom Teacher **(3)**
- TRE 354 - Movement I **(3)**
- Private Lessons or Intrumental Band **(2 units)**

Choose one of the following 3 courses:

- MUH 100 - Introduction to Music (GE) **(2)**
- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 334 - World Music **(2)**

## Theatre Emphasis

- TRE 270 - Acting I **(3)**
- TRE 354 - Movement I **(3)**
- TRE 436 - Stagecraft Techniques **(2)**
- ART 319 - Visual Arts in the Classroom I **(3)**
- MUA 332 - Musical Theatre Production **(1-2)**

## Physical Education/Health

- KIN 312 - Motor Learning and Motor Development **(3)**
- PED 220 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 200 - Optimal Health (GE) **(2)**
- 2-3 units of an approved Education, Kinesiology or Physical Education course **(2-3 units)**.

Choose one:

- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- PSY 360 - Human Sexuality **(3)**

## Human Development

- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**

Choose one:

- FCS 120 - Child and Adolescent Development **(4)**
- FCS 150 - Human Development **(3)**

Choose one:

- PSY 320 - Social Psychology **(3)**
- SOC 250 - Sociology of the Family **(3)**

Choose one:

- FCS 420 - Child Development in the Family and Community **(4)**

- PSY 380 - Family Development and Family Therapies (3)

## Science

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)  
Choose one:
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4)
- CHE 152 - General Chemistry I (GE) (4)

## Math

Individualized programs will be designed with a Math advisor beginning with the sophomore year.

## History and Social Science

### International Studies Emphasis

Choose one (if 4 units) or two courses:

- POL 230 - Introduction to International Relations (4)
- POL 290 - World Regional Geography (3)
- SOC 201 - Cultural Anthropology (GE) (3)

Choose two:

- HIS 355 - Modern Middle East (4)
- HIS 415 - Europe and the World (4)
- POL 435 - Global Governance (4)
- POL 437 - International Economics (4)

### Urban American Studies Emphasis

- HIS 370 - California History (4)  
Choose two:
- HIS 425 - United States Since 1914 (4)
- HIS 435 - Asian-American History: 1800 to the Present (4)
- HIS 480 - San Diego Urban History (4)
- POL 360 - Urban Politics (4)

## Business Emphasis

- ACC 200 - Principles of Accounting for Non-Business Majors (3)
- MGT 212 - Principles of Management (3)
- MKT 332 - Principles of Marketing (3)

Choose one from the following:

- ECO 100 - Survey of Economics (GE) (3)
- ECO 101 - Principles of Macroeconomics (GE) (3)
- ECO 102 - Principles of Microeconomics (GE) (3)

## Media Communication

- COM 175 - Scriptwriting for Television and Film (3)
- COM 195 - Media Literacy (3)
- COM 243 - Introduction to TV and Film Production (3)
- COM 365 - Intercultural Communication (3)

## Cross Disciplinary Studies: Teacher Education, B.A.

Each course in this section requires 20 hours in a field placement in order to meet the required field hours toward the California Preliminary Teaching Credential.

## Program Learning Outcomes

Cross-Disciplinary Studies: Teacher Education prepares candidates for a successful K-12 teaching career. Within the degree are credential courses approved by the California Commission on Teacher Credentialing.

Candidates who complete the program in Cross-Disciplinary Studies: Teacher Education will be able to do the following:

- Demonstrate effective presentation skills, one-on-one and with groups.
- Produce effective written communication.
- Employ critical thinking and logic to solve problems in a variety of environments, to include the K-6 classroom.
- Demonstrate information literacy by acquiring and utilizing specific content information from a variety of sources for classroom instructional planning.
- Apply an interdisciplinary understanding of content regarding diverse and cross-cultural communities.
- Apply faith-based influences and beliefs within professional/educational settings.
- Reflect on and engage in spiritual and professional growth opportunities in personal and professional and educational settings.
- Serve effectively within their communities and in educational settings.

## Concentrations

- Reading, Language and Literature
- Visual and Performing Arts
- Physical Education/Health
- Human Development
- Science
- Math
- History and Social Science

## Lower-Division Requirements

- BIB 101 - Old Testament History and Religion (GE) (2)
- BIB 102 - New Testament History and Religion (GE) (3)
- BIO 103 - Introduction to Biology (GE) (3)
- COM 100 - Principles of Human Communication (GE) (3)
- HIS 110 - World Civilizations I (GE) (3)
- HIS 120 - United States History from Early America to the Twentieth Century (3)

- LIT 200 - Literature and Culture (GE) (2)
- MTH 113 - College Algebra (3) (or passing placement exam scores)
- MTH 213 - Fundamentals of Elementary Mathematics I (3)
- MTH 223 - Fundamentals of Elementary Mathematics II (3)
- PSC 111 - Physical Science for Teachers (GE) (4)
- PSC 112 - Earth and Space Science for Teachers (3)
- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3) **OR**
- PSY 103 - General Psychology (GE) (3)
- TRE 101 - Introduction to Theatre (GE) (2)
- WRI 110 - College Composition: Writing and Research - First Year Experience (GE) (4)
- OR**
- WRI 115 - College Composition: Writing - First Year Experience (GE) (3) **AND**
- WRI 116 - College Composition: Research - First Year Experience (GE) (2)

Choose one course from the following 3 courses:

- FCS 315 - Personal, Family, and Community Health (GE) (3)
- PED 100 - Fitness Through Movement (GE) (2)
- PED 200 - Optimal Health (GE) (2)

Choose one course from the following 2 courses:

- POL 190 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 201 - Cultural Anthropology (GE) (3)

Choose one course from the following 5 courses:

- ART 100 - Introduction to Art (GE) (2)
- ART 102 - Fundamentals of Art (GE) (3)
- ART 200 - History of Art I (GE) (3)
- ART 201 - History of Art II (GE) (3)
- MUH 100 - Introduction to Music (GE) (2)

Choose one course from the following 2 courses:

- PHL 201 - Introduction to Philosophy (GE) (3)
- PHL 211 - Ethics (GE) (3)

Choose one of the following sequences:

- SPA 101 - Elementary Spanish I (GE) (4) **AND**
- SPA 102 - Elementary Spanish II (GE) (4)
- FRE 101 - Elementary French I (GE) (4) **AND**
- FRE 102 - Elementary French II (GE) (4)

- GER 101 - Elementary German I (GE) **(4) AND**
- GER 102 - Elementary German II (GE) **(4)**

Total: 65-69 Units

## Upper-Division Requirements

- ART 319 - Visual Arts in the Classroom I **(3)**
- HIS 370 - California History **(4)**
- LIT 325 - Children's Literature **(3)**
- MUE 341 - Music Skills for the Elementary Classroom Teacher **(3)**
- PED 308 - Methods of Teaching Physical Education **(3)**

Choose one course from the following 2 courses:

- CHU 395 - The Christian Tradition (GE) **(3)**
- THE 306 - The Life of Holiness (GE) **(3)**

Choose one course from the following 3 courses:

- MTH 303 - Problem Solving (GE) **(3)**
- MTH 144 - Calculus With Applications (GE) **(4)**
- MTH 164 - Calculus I (GE) **(4)**

Choose one course from the following 2 courses:

- FCS 120 - Child and Adolescent Development **(4)**
- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**

Choose one course from the following 4 courses:

- LIT 350 - World Literature (GE) **(3)**
- LIT 351 - World Cinema (GE) **(3)**
- LIT 352 - Diverse Voices in American Literature (GE) **(3)**
- LIT 353 - Women Writers (GE) **(3)**

Total 29-30 Units

## Upper Division Requirements in Education

Each course in this section requires 20 hours in a field placement in order to meet the required field hours toward the California Preliminary Teaching Credential. \*\*

- EDU 302 - Foundations of Education and Learning Theory **(3)**
- EDU 306 - Principles of Language Acquisition **(3)**
- EDU 324 - Differentiated Mathematics Instruction for All Learners **(3)**
- EDU 404 - Foundations of Special Education **(3)**

- EDU 417 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**

Total: 14 Units

## Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Teacher Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 9 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

## Reading, Language, and Literature

### English Emphasis

- LIT 250 - Introduction to the Study of Literature **(3)**
  - Linguistics and Writing - One Upper Division Course **(3)**
  - Literature Survey - One Lower Division Course **(3)**
  - Literature Survey - One Upper Division Course **(3)**

### French Emphasis

- FRE 250 - Intermediate French I **(3)**
- FRE 251 - Intermediate French II **(3)**
- FRE 315 - French Culture and Civilization **(3)**
- FRE 320 - Survey of French Literature **(3)**

### Spanish Emphasis

- SPA 251 - Intermediate Spanish II **(3)**
- SPA 302 - Advanced Grammar and Reading **(3)**
- SPA 303 - Advanced Conversation and Composition **(3)**

Choose one:

- SPA 310 - Latin American Culture and Civilization **(3)**
- SPA 315 - Culture and Civilization of Spain **(3)**
- SPA 320 - Mexican American Literature and Culture **(3)**
- SPA 380 - Genre/period Studies in Hispanic Literature or Film **(3)**

## Visual and Performing Arts

### Music Emphasis

- MUA 212 - Beginning Conducting **(2)**
- MUE 341 - Music Skills for the Elementary Classroom Teacher **(3)**
- TRE 354 - Movement I **(3)**
- Private Lessons or Instrumental Band **(2 units)**

Choose one:

- MUH 100 - Introduction to Music (GE) **(2)**
- MUH 101 - Introduction to Listening (GE) **(2)**
- MUH 334 - World Music **(2)**

### Art Emphasis

- ART 319 - Visual Arts in the Classroom I **(3)**
- TRE 354 - Movement I **(3)**

Choose one:

- ART 104 - Three-Dimensional: Composition and Space Design **(3)**
- ART 115 - Drawing I **(3)**

Choose one:

- ART 304 - Modern Art History **(3)**
- ART 305 - Contemporary Art History **(3)**
- ART 325 - Non-Western Art History **(3)**
- ART 335 - Design History: Industrial Revolution to Contemporary Design **(3)**

### Theatre Emphasis

- TRE 270 - Acting I **(3)**
  - TRE 354 - Movement I **(3)**
  - TRE 436 - Stagecraft Techniques **(2)**
  - ART 319 - Visual Arts in the Classroom I **(3)**
  - MUA 332 - Musical Theatre Production **(1-2)**
- OR
- TRE 350 - Musical Theatre **(3)**

### Physical Education/Health

- KIN 312 - Motor Learning and Motor Development **(3)**
- PED 200 - Optimal Health (GE) **(2)**
- PED 220 - Team Sports Fundamentals and Strategies (GE) **(2)**  
2-3 units of an approved Education, Kinesiology or Physical Education course.

Choose one:

- FCS 315 - Personal, Family, and Community Health (GE) **(3)**
- PSY 360 - Human Sexuality **(3)**

### Human Development

- PSY 308 - Developmental Psychology – Birth Through Adolescence **(4)**

Choose one:

- FCS 120 - Child and Adolescent Development (4)
- FCS 150 - Human Development (3)

Choose one:

- PSY 320 - Social Psychology (3)
- SOC 250 - Sociology of the Family (3)

Choose one:

- FCS 420 - Child Development in the Family and Community (4)
- PSY 380 - Family Development and Family Therapies (3)

## Science

- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

Choose one:

- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4)
- CHE 152 - General Chemistry I (GE) (4)

## Math

Individualized programs will be designed with a Math advisor beginning with the sophomore year.

## History and Social Science

### International Studies Emphasis

Choose one (if 4 units) or 2 courses:

- POL 230 - Introduction to International Relations (4)
- POL 290 - World Regional Geography (3)
- SOC 201 - Cultural Anthropology (GE) (3)

Choose two:

- HIS 355 - Modern Middle East (4)
- HIS 415 - Europe and the World (4)
- POL 435 - Global Governance (4)
- POL 437 - International Economics (4)

### Urban American Studies Emphasis

Required:

- HIS 370 - California History (4)

Choose two:

- HIS 435 - Asian-American History: 1800 to the Present (4)
- HIS 480 - San Diego Urban History (4)
- HIS 425 - United States Since 1914 (4)
- POL 360 - Urban Politics (4)

Note(s):

**Completion of this program partially fulfills requirements for a Teaching Credential in the State of California. Refer to the School of Education website for further information.**

**Teacher Education majors must earn a grade of C- or higher in all courses required by the major and in all 400-level elective courses to get credit towards the major.**

**\*\* Failure to complete the fieldwork requirement in an Education (EDU) course will result in a non-passing grade for that course.**

## **Other Programs**

### **Multiple Subjects Teaching Credentials**

Cross-Disciplinary Studies: Teacher Education majors complete a 130-unit undergraduate degree program which includes four Education courses that are required for the Multiple Subjects Teaching Credential. Teacher Education majors also have the option of applying the following credential courses (listed below) to their undergraduate degree if additional units are needed to fulfill the 130-unit requirement for the Bachelor's degree. These 400 level courses are cross listed with the 600 level credential courses, and cross listed courses cannot be repeated between the undergraduate and graduate programs. These courses represent the required courses for the California SB2042 Multiple Subjects Teaching Credential. At the point that the 130-unit requirement is fulfilled, the candidate would apply to the Graduate School of Education and complete the remaining courses required for the credential post-baccalaureate.

Students desiring to enroll in the Multiple Subjects credential courses listed below would need to make application to the Teacher Education program, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching.

\*The following courses may be used for credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

*Prerequisites: Completion of all Cross-Disciplinary Studies: Teacher Education major courses.*

## **Requirements**

- EDU 409 - Classroom Assessment and Research Practices (3)
- EDU 420 - Literacy Instruction for Secondary Teachers (3)
- EDU 420F - Fieldwork for Methods of Teaching Reading and Writing (0.5) \*
- EDU 422 - Interdisciplinary Approaches to Teaching in the Content Areas (3)
- EDU 440 - Elementary Clinical Practice I (4)
- EDU 460 - Elementary Clinical Practice II (4)
- EDU 4CP1 - Elementary Clinical Practice Seminar I (1)
- EDU 4CP2 - Elementary Clinical Practice Seminar II (1)

Note(s):

*\*Requires 20 hours of classroom fieldwork that requires teaching of reading in a small group*

## School of Nursing

### Mission Statement

The School of Nursing at Point Loma Nazarene University exists to support the university Wesleyan mission and to provide an interdisciplinary learning program of excellence. Graduates of the School of Nursing are distinctly identified by grace, truth, and holiness, serving others after the example of Christ, as they are sent to fulfill their calling as professional nurses.

*So He got up from the meal, took off His outer clothing, and wrapped a towel around his waist. After that, He poured water into a basin and began to wash His disciple's feet, drying them with a towel that was wrapped around Him.*

John 13:4-5 NIV

*Now that I, your Lord and Teacher, have washed your feet, you also should wash one another's feet. I have set you an example that you should do as I have done for you.*

John 13:14-15 NIV

### Vision Statement

The School of Nursing at Point Loma Nazarene University embraces, as a covenant, the commitment to excellence within a dynamic Christian environment in which each one will engage in the sacred work of nursing. This sacred work involves symbolically removing one's shoes in service of others.

*Take off your sandals for the place you are standing is holy ground.*

Exodus 3:5 NIV

### Purposes

- To prepare competent, responsible practitioners who are committed to service and leadership as professional nurses;
- To equip graduates with the skills to function at an entry level of professional practice in a wide variety of health care settings;
- To expose students to the dynamic changes occurring in health care today to better prepare them for the changing careers of the future.

### Tradition of Excellence

The nursing program at Point Loma Nazarene University (PLNU) is highly respected in the San Diego community and around the world. Classes provide for individualized attention by caring faculty who are dedicated to the academic and clinical success of each student. The faculty who are professionally qualified focus on effective teaching, and seriously take their call to be Christian role models and mentors. The School of Nursing (SON) is approved by the California Board of Registered Nursing and nationally accredited by the Commission on Collegiate Nursing Education. Graduates are thus eligible to take the NCLEX-RN licensure exam and apply for public health nursing certification upon graduation. This accredited program provides preparation for graduate study.

## **Career Opportunities**

The program is designed around five program values: caring faithfully, leading faithfully, communicating faithfully, following faithfully and inquiring faithfully. Nursing majors compile a portfolio showing their progress toward meeting competencies in each of these areas of the nursing major. The compassionate attitudes and excellent preparation of PLNU nurses make them highly sought after by San Diego County health care agencies.

## **Admission Requirements**

Students are admitted as freshman to pre-nursing status and must successfully complete the required prerequisite courses to be considered for the nursing major. Transfer students must have all prerequisite courses and Microbiology completed at the time of application to the B.S.N. program. Students are selected for admission to the sophomore class annually for the fall semester. Selection is made on the basis of GPA at PLNU, cumulative GPA, strength of application, letter of recommendation and completion of pre-requisite classes. A minimum overall 3.00 college/university GPA is required on a four-point grade scale. LVNs licensed in the State of California are accepted into the program with advanced standing based upon completion of special LVN admission criteria, on a space available basis.

Throughout the curriculum (whether pre-nursing or nursing) students may repeat one pre-requisite or nursing course. With the need for a second repeat of any pre-requisite or nursing course the student will be dismissed from the nursing program. If there are two repeats of pre-requisite courses in pre-nursing, the student will not be eligible for application to the nursing major.

Students who have a previous bachelor's degree in a major other than Nursing may be considered for admission into sophomore Nursing class, however, a full three years will be required to complete Nursing coursework. The course load may be lighter depending on the number of general education classes already completed. PLNU does not have an accelerated nursing program.

For further information:

- [www.pointloma.edu/nursing](http://www.pointloma.edu/nursing)
- Marsha Reece, Program Coordinator and Selection Committee Chairperson; (Office) 619-849-7055 or (email) [marshareece@pointloma.edu](mailto:marshareece@pointloma.edu)

## **Eligibility Requirements**

Students are eligible to be considered for the Point Loma Nazarene University Nursing Program when the following conditions are met:

- Acceptance to PLNU as a Pre-Nursing Major.
- Submission of an application for the nursing program. (Application forms available in December at the School of Nursing office.) Deadline is February 1.
- Cumulative Grade Point Average (GPA) of 3.0 or better on a four-point scale.
- Completion of NSG 150 with a minimum grade of "B."

- Caring Faithfully; Intro to Nursing (2 semester units - PLNU pre-nursing students only)
- Completion of the following prerequisites (or equivalents) with a minimum grade of "C" (2.0) in each:
- Inorganic and Organic/Biology Chemistry (5 semester units - with labs);
- Human Anatomy and Physiology (8 semester units - with labs);
- General Psychology or Personal Identity (3 or 4 semester units);
- Math determined by PLNU math placement test or achievement on SAT;
- Human Development (3 semester units) strongly recommended prior to NSG 250 ;
- Nutrition (3 semester units); strongly recommended prior to NSG 250 ;
- A student may be considered with a repeat of a pre-requisite course (to achieve the minimum grade);
- Transfer students must have all Pre-Requisite courses AND Microbiology completed at the time of application to the BSN program.
- For PLNU first-time freshmen pre-nursing majors, BIO 130 , BIO 140 and CHE 103 are required to be taken at PLNU and will not be accepted in transfer except for elective credit. Priority admission to the nursing major is given to PLNU pre-nursing students who have completed prerequisite sciences at PLNU.
- Second Degree Students (Students who have a previous bachelor's degree in a major other than nursing) may be considered for admission into the sophomore nursing class, however, a full three years will be required to complete the required nursing coursework. The program cannot be accelerated but the course load may be lighter according to the number of general education classes a student is given credit for.

## **Selection Process**

Eligible students are selected for admission to the nursing program by the School of Nursing Selection Committee. Selection is made on the basis of cumulative GPA, quality of entire application, letter of recommendation, and units at PLNU. Spaces in nursing courses are limited.

- Priority consideration is given to applicants who have completed:
- all prerequisite courses by the end of Spring term preceding the Fall entry date
- 15 semester units and 2 semesters at PLNU
- the application process prior to February 1 preceding the Fall term entry date
- Secondary consideration will be given to transfer applicants who have completed:
- all prerequisite courses prior to turning in BSN application.
- the application process prior to February 1 preceding the Fall term entry date
- Selection is made on the basis of cumulative GPA, GPA at PLNU, strength of application, recommendation form, and units at PLNU
- The Selection Committee will meet to finalize the selection process after all spring grades have been received and all students will then be notified by mid-June
- An interview may be requested

## **Health Status**

Once accepted into BSN program:

- Students must provide evidence that they are physically and emotionally able to perform the duties required.
- A physical examination by a health care provider with information completed on a form provided by the School of Nursing is necessary. The examination includes current immunizations and tests as required by the School of Nursing.
- Tuberculin test may required annually during the program.

## **Background Check**

Per agreement with the San Diego Nursing Service Education Consortium and affiliated hospitals, a background check and drug screening will be required prior to your first clinical experience. If a flag occurs from either your background check or drug screening, this may result in immediate dismissal from the Point Loma Nazarene University BSN program.

## **Other Provisions**

- Clinical facilities have a wide geographical distribution. Students are responsible for providing their own transportation to fulfill clinical requirements. This also requires a valid driver's license and proof of auto insurance.
- A fee will be assessed yearly to Sophomore, Junior, and Senior Nursing students.
- Students are required to purchase uniforms, watch with second hand, skills lab kit, and other equipment as necessary.
- Students should be aware that the B.S.N. program is a full three years in length upon completion of prerequisite courses. Those with transfer credits will still need three years of Nursing courses to complete the degree.
- Upon acceptance to the nursing program, a current American Heart Association BLS certification is mandatory for all Nursing majors in order to participate in clinical coursework. Cards from the American Red Cross or BART are NOT acceptable.

## **Faculty**

Mary Adams, Ph.D., R.N.  
*Loyola University Chicago*

Angelica Almonte, Ph.D., R.N.  
*University of San Diego*

Linda Hensley, D.N.P, R.N., C.N.S., B.S.N., Associate Dean-BSN Program  
*Brandman University*

Kristen Lambert, Ph.D., R.N.  
*University of San Diego*

Jen King, M.S.N., R.N., C.N.S.  
*Point Loma Nazarene University*

Jeanne Maiden, Ph.D., R.N., C.N.S.-B.C., Associate Dean-MSN Program  
*University of San Diego*

Carlota Quiban, Ph.D., R.N.  
*University of Phoenix*

Larry Rankin, Ph.D., R.N., C.N.E.  
*University of Michigan*

Michelle Riingen, D.N.P., R.N., C.N.S.-B.C., Associate Dean-RN-BSN Program  
*Case Western Reserve University*

Monique Sawyer, D.N.P., R.N., P.M.H.N.P.-B.C.  
*Arizona State University*

Christine Sloan, Ph.D., R.N., C.N.S.  
*University of San Diego*

Sharon Smith, Ph.D., R.N.  
*University of California San Francisco*

Barbara Taylor, Ph.D., R.N., Dean  
*University of San Diego*

## Major

### Nursing, B.S.N.

#### Program Learning Outcomes

**INQUIRING FAITHFULLY:** The student will demonstrate knowledge, skill and behavior of the evidence-based practice of nursing which integrates growth in reasoning, analysis, decision-making and the application of theory with the goal of advocating for others and/or self. This includes holistic nursing skills and the nursing process.

**LEADING FAITHFULLY:** The student will incorporate a foundational relationship with Christ and others and embrace a willingness to serve others in the midst of life circumstances (e.g., illness, injustice, poverty). The student will role-model the need for “Sabbath Rest” as a means of personal renewal, and true care of the self, so that service to others is optimally achieved. The student will incorporate the characteristics of a servant leader including: humility, courage, forgiveness, discernment.

**COMMUNICATING FAITHFULLY:** This student will actively engage in the dynamic interactive process that is intrapersonal and interpersonal with the goal of advocating for others and/or self. This includes effective, culturally appropriate communication which conveys information, thoughts, actions and feelings through the use of verbal and nonverbal skills.

**FOLLOWING FAITHFULLY** As defined as claiming the challenge from Florence Nightingale that nursing is a “divine imposed duty of ordinary work.” The nursing student will integrate the ordinary work by complying with and adhering to regulatory and professional standards (e.g. ANA Code of Ethics, the California Board of Registered Nursing, Scope of Nursing Practice, SON Handbook). This includes taking responsibility, being accountable for all actions and treating others with respect and dignity.

**CARING FAITHFULLY:** The student will embrace a calling to the ministry of compassionate care for all people in response to God’s grace, which aims to foster optimal health and bring comfort in suffering and death.

#### Lower-Division Requirements

- NSG 150 - Caring Faithfully: An Introduction to Nursing (2) \*
- NSG 250 - Nursing of Individuals: Adult Health I (4)
- NSG 251 - Nursing of Individuals: Clinical Practicum I (3)
- NSG 260 - Nursing of Individuals: Adult Health II (4)
- NSG 261 - Nursing of Individuals: Clinical Practicum II (3)
- NSG 270 - Pharmacology in Nursing (2)
- BIO 130 - Human Anatomy and Physiology I (GE) (4) \*
- BIO 140 - Human Anatomy and Physiology II (4) \*
- BIO 220 - Microbiology of Infectious Diseases (4) †
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4) \*
- FCS 150 - Human Development (3) ††
- FCS 225 - Fundamentals of Nutrition (3) ††
- MTH 203 - Introduction to Statistics (3)
- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3) \*

Select 3-4 General Education units from The Social World

Total: 52 Units

Note(s):

*\*Prerequisite to Nursing program, i.e., admission to NSG 250 and NSG 251.*

*†May be allowed to complete concurrent with first Nursing course.*

*††Must be completed by the end of the sophomore year.*

*A grade of at least "B" in NSG 150 and a minimum GPA of 3.0 in all pre-requisite and nursing courses are required for the major in Nursing in order to progress to the next course or level.*

## Upper-Division Requirements

- NSG 310 - Nursing of Families: Child/Adolescent Focus (2)
- NSG 311 - Nursing of Families: Child/Adolescent Clinical Practicum (3)
- NSG 330 - Nursing of Families: The Childbearing Process (2)
- NSG 331 - Nursing of Families: The Childbearing Process Clinical Practicum (3)
- NSG 340 - Nursing of Families: Adult Health III (2)
- NSG 341 - Nursing of Families: Adult Health III Clinical Practicum (3)
- NSG 399 - Nursing Research (2)
- NSG 450 - Nursing of Communities: Mental Health Focus (3)
- NSG 451 - Nursing of Communities: Mental Health Clinical Practicum (3)
- NSG 460 - Nursing of Communities: Community Health Focus (3)
- NSG 461 - Nursing of Communities: Community Health Focus Clinical Practicum (1)
- NSG 470 - Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice (3)
- NSG 480 - Nursing Capstone (1)
- NSG 481 - Nursing Capstone Practicum (3)
- PSY 321 - Abnormal Psychology (3)
- SOC 360 - Race and Ethnicity (3)

Total: 40 Units

## School of Theology and Christian Ministry

### Purposes

- To help students appreciate and understand Christian history, theology, and spirituality from the perspective of the biblical, historical Christian faith;
- To create opportunities for students to apply and integrate classroom knowledge and principles to in-service training experiences in local churches, cross-cultural settings, and missions;
- To prepare students to pursue the study of philosophy, theology, or religion in a graduate school or seminary;
- To educate students to be "practical thinkers" and "thinking practitioners."

### Tradition of Excellence

The School of Theology and Christian Ministry faculty is committed to Christian service and the Wesleyan heritage. It offers personal attention and programs geared toward preparing women and men for ministry in a variety of forms as well as for other professions. With approximately fifty denominations represented at Point Loma, students have the opportunity to learn the similarities and differences between the major denominations and traditions within the Christian faith. The faculty of the School of Theology and Christian Ministry is diverse in educational background, with degrees from leading seminaries and universities across the country. Faculty members have published commentaries, dictionary articles, Christian life pieces, books, articles in national scholarly journals, and Christian education booklets. All professors are members in academic societies in fields of study. Outside the classroom, the faculty are committed members of local congregations and often spend weekends preaching, teaching Sunday school, or speaking at camps and retreats.

## **Career Opportunities**

Many of our students go directly into Christian ministry or other professions; others go on to graduate school. The School is proud of the acceptance rate of its alumni into a variety of graduate programs and law schools across the United States. To assist those entering Christian ministry of all sorts, "hands-on" internships in local churches are available. Also, six semester units can be earned through the summer ministries program by working in a local church, urban mission, or summer camp.

## **Centers**

Point Loma Nazarene University maintains centers within the organization of the School of Theology and Christian Ministry:

- The Center for Pastoral Leadership

## **Faculty**

Ron Benefiel, Ph.D.  
*University of Southern California*

Brad Kelle, Ph.D.  
*Emory University*

Rebecca Laird, D. Min.  
*Drew University*

Michael Lodahl, Ph.D.  
*Emory University*

Kara Lyons-Pardue, Ph.D.  
*Princeton Theological Seminary*

Mark Maddix, Ph.D., Dean  
*Trinity Evangelical Divinity School*

Mark Mann, Ph.D.  
*Boston University*

Samuel Powell, Ph.D.  
*Claremont Graduate School*

Heather Ross, M.A.  
*De Paul University*

Robert Smith, D.Min.  
*Fuller Theological Seminary*

Robert Thompson, Ph.D.  
*University of Oklahoma*

Montague Williams, Ph.D. Cand.  
*Boston University*

## **Major**

### **Christian Studies, B.A.**

#### Program Learning Outcomes

**Students who complete the program in Christian Studies Majors will be able to:**

- Interpret scripture evidencing biblical literacy.
- Articulate clear theological doctrines relevant to Christian life and ministry.
- Engage the perennial questions of the human condition using resources from philosophy.
- Apply principles of Christian formation for the practice of ministry.

#### Concentrations

- General  
Concentration

- Biblical Studies  
Concentration

- Leadership Concentration

- Philosophy  
Concentration

- Theology  
Concentration

- Youth and Family Concentration

#### Christian Studies Core Course Requirements

- BIB 101 - Old Testament History and Religion (GE) (2)
  - BIB 102 - New Testament History and Religion (GE) (3)
  - BIB 240 - Reading Scripture Faithfully (3)
  - CMI 155 - Christian Formation and Ministry (3)
  - PHL 250 - God and Philosophy (3)
  - THE 250 - Introduction to Christian Theology (3)
  
  - PHL 201 - Introduction to Philosophy (GE) (3)
- OR**
- PHL 211 - Ethics (GE) (3)

- HEB 205 - Biblical Hebrew I (GE) (4) **and**
- HEB 206 - Biblical Hebrew II (GE) (4)
- OR**
- GRK 207 - Biblical Greek I (GE) (4) **and**
- GRK 208 - Biblical Greek II (GE) (4)
- CHU 395 - The Christian Tradition (GE) (3)
- THE 495 - Justice in the Church: Gender, Households, and Unity in the Body of Christ (3)

Total: 34 Units

## Students Must Also Complete a Required Concentration

### General Concentration

- **Choose four (4) upper division courses choosing one course in each of these areas: CMI, BIB, THE and PHL (12 units)\*\***
- **Choose four (4) upper division courses from the elective choices below (12 units)\*\***

Total: 24 units

Major Total: 58 units

### Biblical Studies Concentration

- **Choose three (3) upper division courses choosing one course in each of these areas: CMI, THE and PHL (9 units)\*\***
- **Choose five (5) upper division courses from the BIB elective choices below (15 units)\*\***

Total: 24 units

Major Total: 58 units

### Leadership Concentration

- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 350 - Church as a Witness to the World (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 410 - Leading in Ministry (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- CMI 450 - Internship (3)
- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, THE and PHL (9 units)\*\***
- **Choose three (3) interdisciplinary units from the following:**
- MGT 212 - Principles of Management (3)

- MGT 382 - Applied Entrepreneurship (3)
- MGT 470 - Nonprofit Organization Management (3)

Total: 33 units

Major Total: 67 units

### Philosophy Concentration

- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, CMI and THE (9 units)\*\***
- **Choose five (5) upper division courses from the PHL elective choices below (15 units)\*\***

Total: 24 units

Major Total: 58 units

### Theology Concentration

- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, CMI and PHL (9 units)\*\***
- **Choose five (5) upper division courses from the THE elective choices below (15 units)\*\***

Total: 24 units

Major Total: 58 units

### Youth and Family Concentration

- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 340 - Foundations for the Practice of Youth Ministry (3)
- CMI 350 - Church as a Witness to the World (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 425 - Youth and Family Ministry (3)
- CMI 450 - Internship (3)
- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, THE and PHL (9 units)\*\***
- **Choose two to four (2-4) interdisciplinary units from the following:**
  - FCS 310 - Early Childhood Education (4)
  - FCS 313 - Adolescent Development in the Family Context (2)
  - PSY 308 - Developmental Psychology – Birth Through Adolescence (4)
  - PSY 321 - Abnormal Psychology (3)
  - SOC 250 - Sociology of the Family (3)

Total: 32-34 units

Major Total: 66-68 units

**\*\* Christian Studies Elective Options:**

- BIB 301 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 302 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 314 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)
- BIB 335 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse (3)
- BIB 378 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- BIB 410 - Biblical Theology (3)
- BIB 413 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 490 - Special Studies in Bible (1-3)
- BIB 495 - Seminar in Biblical Literature (3)
- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 340 - Foundations for the Practice of Youth Ministry (3)
- CMI 345 - Enacting Worship (3)
- CMI 350 - Church as a Witness to the World (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 410 - Leading in Ministry (3)
- CMI 415 - The Church of the Nazarene: History and Polity (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- CMI 425 - Youth and Family Ministry (3)
- CMI 490 - Special Studies in Christian Ministry (1-3)
- THE 305 - Christian Faith and the Natural Sciences (3)
- THE 315 - Christian and Religious Themes in Literature (3)
- THE 320 - The World's Faith Traditions (3)
- THE 325 - The Human Person and Theology and Psychology (3)
- THE 330 - Christ and the Church (3)
- THE 335 - Christian Ethics (3)
- THE 410 - The Ministry and Sermons of John Wesley (3)
- THE 415 - Three Traditions of Protestant Theology (3)
- PHL 277 - Logic (3)
- PHL 301 - Plato and Aristotle (3)
- PHL 302 - Descartes through Hegel (3)
- PHL 321 - Justice, Politics, and the Social World (3)
- PHL 331 - Existential Philosophy and Literature (3)
- PHL 341 - Philosophy and Art (3)
- PHL 360 - Philosophy and the Sciences (3)
- PHL 371 - Education and the Ethical Life (3)
- PHL 380 - Alienation, Transformation, and Reconciliation in Film (3)
- PHL 381 - Ethics, Responsibility, and Love (3)

**Philosophy, B.A.**

The discipline of philosophy, the critical inquiry into the structure of reality, knowledge, and values, seeks to clarify and explicate the presuppositions and implications of various interpretations of human experience. The purposes of the Philosophy major are:

- To develop critical and creative thinking, soundness of argument, clarity of thought, and precision in expression;
- To cultivate a critical appreciation of the enduring questions constituting the philosophical heritage;
- To explore the relation between philosophical and religious thought; and
- To prepare students for graduate study.

## Program Learning Outcomes

*Students who complete the program in Philosophy will be able to:*

- Engage in the disciplined practice of asking questions about God, the world, and themselves, including questions for which there may be no easy answers.
- Differentiate among interrelated movements or figures in the history of philosophy.
- Evaluate the strengths and weaknesses of human reasoning or experience to provide an adequate account of the human condition, the world, ethics and Christian life.

## Lower-Division Requirements

- PHL 201 - Introduction to Philosophy (GE) (3)  
**OR**
- PHL 211 - Ethics (GE) (3)
- PHL 277 - Logic (3)

Total: 6 Units

## Upper-Division Requirements

- PHL 301 - Plato and Aristotle (3)
- PHL 302 - Descartes through Hegel (3)
- PHL 401 - Contemporary Voices in Philosophy, Theology, and Ethics (3)  
**OR**
- PHL 411 - The Search for Meaning: Goodness, Being, and Truth (3)
- PHL 490 - Special Studies in Philosophy (1-3)
- **Eighteen (18) additional SOTCM upper-division major elective units, 15 of which will need to be upper-division PHL courses.**

Total: 28 Units

Major Total: 34 Units

## Recommended

*Greek, German, or French should be used to fulfill the general education foreign language requirement.*

## **Minor**

### **Biblical Studies Minor**

#### Lower Division Requirements

- BIB 101 - Old Testament History and Religion (GE) (2)
- BIB 102 - New Testament History and Religion (GE) (3)
- BIB 240 - Reading Scripture Faithfully (3)

Total: 8 units

#### Upper Divisions Requirements

- **Choose four (4) upper division BIB courses with at least one focusing on the Old Testament and at least one focusing on the New Testament.**

Total: 12 units

Minor Total: 20 units

### **Christian Mission & Intercultural Ministry Minor**

#### Lower Division Requirements

- CMI 155 - Christian Formation and Ministry (3)
- SOC 201 - Cultural Anthropology (GE) (3)

Total: 6 units

#### Upper Division Requirements

- CMI 350 - Church as a Witness to the World (3)
- CMI 410 - Leading in Ministry (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- THE 320 - The World's Faith Traditions (3)

Total: 12 units

Minor Total: 18 units

### **Christian Studies Minor**

#### Lower Division Requirements

- BIB 240 - Reading Scripture Faithfully (3)
- CMI 155 - Christian Formation and Ministry (3)
- PHL 250 - God and Philosophy (3)
- THE 250 - Introduction to Christian Theology (3)

Total: 12 units

## Upper Division Requirements

- **Choose four (4) upper division courses from the following electives\*\***

### \*\* Christian Studies Elective Options:

- BIB 301 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 302 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 314 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)
- BIB 335 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse (3)
- BIB 378 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- BIB 410 - Biblical Theology (3)
- BIB 413 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 490 - Special Studies in Bible (1-3)
- BIB 495 - Seminar in Biblical Literature (3)
- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 340 - Foundations for the Practice of Youth Ministry (3)
- CMI 345 - Enacting Worship (3)
- CMI 350 - Church as a Witness to the World (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 410 - Leading in Ministry (3)
- CMI 415 - The Church of the Nazarene: History and Polity (3)
- CMI 420 - Compassionate Ministry in Local Context (3)
- CMI 425 - Youth and Family Ministry (3)
- CMI 490 - Special Studies in Christian Ministry (1-3)
- THE 305 - Christian Faith and the Natural Sciences (3)
- THE 315 - Christian and Religious Themes in Literature (3)
- THE 320 - The World's Faith Traditions (3)
- THE 325 - The Human Person and Theology and Psychology (3)
- THE 330 - Christ and the Church (3)
- THE 335 - Christian Ethics (3)
- THE 410 - The Ministry and Sermons of John Wesley (3)
- THE 415 - Three Traditions of Protestant Theology (3)
- PHL 277 - Logic (3)
- PHL 301 - Plato and Aristotle (3)
- PHL 302 - Descartes through Hegel (3)
- PHL 321 - Justice, Politics, and the Social World (3)
- PHL 331 - Existential Philosophy and Literature (3)
- PHL 341 - Philosophy and Art (3)
- PHL 360 - Philosophy and the Sciences (3)

- PHL 371 - Education and the Ethical Life (3)
- PHL 380 - Alienation, Transformation, and Reconciliation in Film (3)
- PHL 381 - Ethics, Responsibility, and Love (3)

Total: 12 units

Minor Total: 24 units

## **Philosophy Minor**

### Lower-Division Requirements

- PHL 201 - Introduction to Philosophy (GE) (3)

Total: 3 Units

### Upper-Division Requirements

- PHL 301 - Plato and Aristotle (3)
- PHL 302 - Descartes through Hegel (3)
- **Nine (9) additional units in PHL of which six (6) units must be upper division**

Total: 15 Units

Minor Total: 18 Units

## **Science and Christian Faith Minor**

### Lower Division Requirements

- THE 250 - Introduction to Christian Theology (3)

Total: 3 units

### Upper Division Requirements

- CHU 395 - The Christian Tradition (GE) (3)
- THE 305 - Christian Faith and the Natural Sciences (3)
- THE 325 - The Human Person and Theology and Psychology (3)
- PHL 360 - Philosophy and the Sciences (3)
- **Choose three (3) additional upper division units from any THE, BIB, or CMI course.**

Total: 15 units

Minor Total: 18 units

## **Worship Arts Minor**

### Lower Division Requirements

- CMI 155 - Christian Formation and Ministry (3)
- CMU 201 - Instruments in Worship (2)
- OR**
- CMU 202 - Multi-Media for Worship Ministry (2)

Total: 5 units

### Upper Division Requirements

- CMI 345 - Enacting Worship (3)
- CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)

**Choose two (2) course from the following:**

- BIB 378 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMU 314 - Music and Worship (3)
- THE 330 - Christ and the Church (3)

Total: 12 units

Minor Total: 17 units

## **Youth and Family Ministries Minor**

### Lower Division Requirements

- CMI 155 - Christian Formation and Ministry (3)

Total: 3 units

### Upper Division Requirements

- CMI 300 - Teaching and Preaching the Bible (3)
- CMI 325 - Christian Care of Souls (3)
- CMI 415 - The Church of the Nazarene: History and Polity (3)
- CMI 425 - Youth and Family Ministry (3)
- CMI 420 - Compassionate Ministry in Local Context (3)

- FCS 310 - Early Childhood Education (4)
- OR**
- FCS 313 - Adolescent Development in the Family Context (2)

Total: 17-19 units

Minor Total: 20-22 units

## **Special Programs**

### **Community Classroom Certificate in Intercultural Engagement**

#### **Certificate**

#### **Certificate in Intercultural Engagement at Community Classroom**

The Certificate in Intercultural Engagement at Community Classroom is designed for students who want part of their academic experience to include a focused engagement in a multicultural setting that will nurture their Christian formation academically and vocationally.

#### **Certificate Requirements**

Students pursuing the Certificate in Intercultural Engagement at Community Classroom must complete:

- Twenty (20) hours of co-curricular service learning . Ten (10) hours are built into each Community Classroom course.
- Complete six (6) units from the following Community Classroom courses when offered at City Heights. A Minimum of three (3) units must be unique to the certificate.

Choose six (6) units from the following:

- CHU 395 - The Christian Tradition (GE) (3)
- CMI 155 - Christian Formation and Ministry (3)
- CMI 350 - Church as a Witness to the World (3)
- PHL 211 - Ethics (GE) (3)
- SOC 360 - Race and Ethnicity (3)
- SPA 101 - Elementary Spanish I (GE) (4)
- SPA 102 - Elementary Spanish II (GE) (4)
- THE 306 - The Life of Holiness (GE) (3)

## **Humanities Honors Program**

#### **Purpose**

Point Loma Nazarene University Humanities Honors Program seeks to foster a community of intellectually-dedicated scholars that embodies the Christian mission of the university. Students who complete the honors program will be able to:

- Analyze and discuss diverse traditions while examining them in light of Christian faith.
- Interpret written and visual media in light of their contexts, complexity, and aesthetics.
- Articulate life questions within multidisciplinary and theological frameworks.
- Demonstrate the ability to design and participate in discourses in an informed and hospitable manner.
- Participate in acts of devotion and works of mercy through service opportunities, as informed by the Wesleyan tradition.

### **Humanities Honors Program Requirements**

#### **Lower Division Requirements:**

##### **Fall Year 1:**

- HON 100 Introduction to Christian Scholarship
- HON 101 Rhetoric: Critical Communication
- HON 120 Foundations in Humanities I: Ancient/Medieval

##### **Spring Year 1:**

- HON 102 Introduction to Philosophy
- HON 220 Foundations in Humanities II: Renaissance/Enlightenment
- HON 150 Humanities Honors Abroad

##### **Fall Year 2:**

- HON 201 Old Testament History and Religion
- HON 202 New Testament History and Religion
- HON 320 Foundations in Humanities III: 19th/20th Centuries

##### **Spring Year 2:**

- HON 210 Politics of Race, Class and Gender
- HON 310 Christianity in Global Perspective

### **Total Lower Division Units: 35**

#### **Upper Division Requirements**

##### **Fall Year 3:**

- HON 350 Humanities Honors Integrative Seminar

### **Total Upper Division Units: 1**

#### **Year 4 [Optional]:**

##### **Fall Year 4:**

HON 498 Honors Project I

##### **Spring Year 4:**

## Requirements

### Humanities Honors Program General Education

Students in the Humanities Honors Program must complete all General Education requirements as outlined below.

#### Humanities Honors Program General Education Requirements

##### I. Humanities Core [3 courses; 5 units]

- HON 100 - Introduction to Christian Scholarship (GE) (1)
- HON 150 - Humanities Honors Abroad (GE) (3)
- HON 350 - Humanities Honors Integrative Seminar (GE) (1)

##### II. Responding to the Sacred

###### A. Biblical Foundations [2 courses; 5 units]

- HON 201 - Old Testament History and Religion (GE) (2)
- HON 202 - New Testament History and Religion (GE) (3)

###### B. The Christian Tradition [1 course; 3 units]

- HON 310 - Christianity in Global Perspective (GE) (3)

##### III. Developing Cognitive Abilities

###### A. Personal Development [1 course; 3 units]

- PSY 101 - Psychology of Personal Development - First Year Experience (GE) (3)

###### B. Critical Thinking and Communication [1 course; 4 units]

- HON 101 - Rhetoric: Critical Communication (GE) (4)

###### C. Problem Solving [1 course; 3-4 units]

- MTH 144 - Calculus With Applications (GE) (4) **OR**
- MTH 164 - Calculus I (GE) (4) **OR**
- MTH 173 - Business Calculus (GE) (3) **OR**
- MTH 303 - Problem Solving (GE) (3)

##### IV. Exploring an Interdependent World

A. The Natural World [2 courses; one from each group, and at least one with a lab; 8-9 units]

Biological Science [1 course from this group]

- BIO 101 - Human Biology and Bioethics (GE) (3)  
**and**
- BIO 101L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 102 - Environment and People (GE) (4)
- BIO 103 - Introduction to Biology (GE) (3)  
**and**
- BIO 103L - Introduction to Biology Laboratory (GE) (1)
- BIO 104 - Biotechnology and Society (GE) (4)
- BIO 105 - Ecology and Conservation (GE) (3)  
**and**
- BIO 105L - Ecology and Conservation Laboratory (GE) (1)
- BIO 130 - Human Anatomy and Physiology I (GE) (4)
- BIO 210 - Cell Biology and Biochemistry (GE) (4)
- BIO 211 - Ecological and Evolutionary Systems (GE) (4)

Physical Science [ 1 course from this group]

- CHE 101 - Chemistry and Society (GE) (4)
- CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE) (4)  
**and**
- CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 152 - General Chemistry I (GE) (4)
- PHY 141 - General Physics I (GE) (4)
- PHY 241 - University Physics I (GE) (4)
- PSC 105 - The Cosmos (GE) (4)

B. Physical Fitness and Nutrition [2 courses; 2-4 units]

*One of the following courses is required:*

- PED 100 - Fitness Through Movement (GE) (2)
- PED 200 - Optimal Health (GE) (2)
- FCS 315 - Personal, Family, and Community Health (GE) (3)

*Additionally, any one (1) unit activity course numbered PED102 - PED184 **OR** one of the following is required:*

- PED 220 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 225 - Individual and Dual Sports (GE) (2)

C. The Social World [1 course; 4 units]

- HON 210 - Politics of Race, Class and Gender (GE) (4)

V. Seeking Cultural Perspective

A. Foundations in Humanities [3 courses; 12 units]

- HON 120 - Foundations in Humanities I: Ancient/Medieval (GE) (4)
- HON 220 - Foundations in Humanities II: Renaissance/Enlightenment (GE) (4)
- HON 320 - Foundations in Humanities III: 19th/20th Centuries (GE) (4)

## B. Philosophy [1 course; 3 units]

- HON 102 - Introduction to Philosophy (GE) (3)

## C. Foreign Language [2 courses; 8-9 units]

- SPA 101 - Elementary Spanish I (GE) (4)
- SPA 102 - Elementary Spanish II (GE) (4)
- FRE 101 - Elementary French I (GE) (4)
- FRE 102 - Elementary French II (GE) (4)
- GER 101 - Elementary German I (GE) (4)
- GER 102 - Elementary German II (GE) (4)
- HEB 205 - Biblical Hebrew I (GE) (4)
- HEB 206 - Biblical Hebrew II (GE) (4)
- GRK 207 - Biblical Greek I (GE) (4)
- GRK 208 - Biblical Greek II (GE) (4)

## Course Information

The faculty annually reviews course offerings and descriptions. A thorough examination by academic departments and schools takes place on a five-year cycle of program review that includes an assessment of student learning outcomes. The following pages contain a complete listing of requirements in the university's various academic programs.

- Course Numbering
- Special Designations
- Remedial Courses
- Alternate-year Offerings
- Prerequisite/Co-requisite
- Quad Courses

## Accounting

### ACC 200 - Principles of Accounting for Non-Business Majors

(3)

This course presents an introduction to: (1) the theory and practice of financial accounting, including the measuring, recording and reporting of business transactions for external uses, and (2) the study of managerial accounting, including the analysis of accounting information for planning and management decision-making. Topics include the

understanding and preparation of financial statements and all related component sections, cost behavior, budgeting, time value of money, and performance measurement and evaluation techniques.

### **ACC 201 - Principles of Financial Accounting**

**(4)**

The theory and practice of accounting applicable to measuring, recording and reporting business transactions for external users. Topics include generally accepted accounting principles with introductions to business ethics, the accounting process, financial statement preparation, merchandising operations, short-term liquid assets, fixed assets, inventories, current and long-term liabilities, and owner's equity.

Prerequisite(s): All students must have a laptop computer.

Pre or Corequisite: BUS 100

Recommended: Recommended for sophomores.

### **ACC 202 - Principles of Managerial Accounting**

**(3)**

A study of accounting information systems used to assist decision makers through identifying, measuring, and processing relevant information and communicating the information through reports. Topics include cost concepts and allocations, cost volume profit analysis, budgeting, performance measurement and evaluation techniques, short run decision analysis, pricing decisions, and capital investment analysis.

Prerequisite(s): ACC 201

Pre or Corequisite: MTH 153 or MTH 173, or consent of instructor for non-majors.

Recommended: Recommended for sophomores.

### **ACC 350 - Ethics in Accounting**

**(3)**

This course provides students with the theoretical knowledge and practical framework to identify and deal with ethical conflicts that are encountered in the accounting profession. Topics include ethical principles and reasoning, core philosophies, virtues and justice, social responsibility, greed, corruption, collusion, fraud, earnings management, confidentiality, independence, moral seduction and conflicts of interest.

Prerequisite(s): ACC 202

### **ACC 370 - Intermediate Accounting I**

**(3)**

This course provides a review of the accounting reporting process with an in-depth study of generally accepted accounting principles as they relate to assets and their related income statement accounts. Topics also include time value concepts and the recognition of revenue.

Prerequisite(s): ACC 202 , MTH 153 or MTH 173 , or consent of instructor.

### **ACC 371 - Intermediate Accounting II**

**(3)**

This course provides a review of the accounting reporting process with an in-depth study of generally accepted accounting principles as they relate to liabilities, stockholders' equity and their related income statement accounts. Topics include special accounting problems, accounting for investments, dilutive securities, income taxes, post-retirement benefits, leases, and the statement of cash flows.

Prerequisite(s): ACC 370.

### **ACC 375 - Managerial Cost Accounting**

**(3)**

A study of basic cost accounting concepts and procedures, with emphasis on the development, interpretation, and application of managerial accounting information for planning, control, and decision-making. Topics include financial statement analysis, break-even analysis, profit planning, product costing theories and systems, pricing and budgeting strategies, and project control tools in commercial and government cost accounting.

Prerequisite(s): ACC 202.

### **ACC 410 - Federal Tax Accounting I**

**(3)**

A study of the basic Federal income tax laws as they relate primarily to individuals. Topics include gross income inclusions and exclusions, deductions for and from adjusted gross income, depreciation and cost recovery, gains and losses on property transactions, at-risk provisions and passive loss rules, tax determination, credits, exemptions, filing status, and tax planning.

Prerequisite(s): ACC 202.

### **ACC 411 - Federal Tax Accounting II**

**(3)**

A study of Federal income tax laws as they primarily relate to corporations, and partnerships. Topics include the components of the tax formula for corporations and partnerships, including organization and capital structure, redemptions, liquidations, and reorganizations. Additional topics include basic components and issues involving gift and estate taxation, multi-state tax allocation and apportionment, tax-exempt entities, tax planning, and tax administration.

Prerequisite(s): ACC 410.

### **ACC 421 - Advanced Accounting**

**(3)**

This course prepares students in advanced accounting knowledge. Topics include multinational entities, partnerships, government entities and not-for-profit organizations.

Prerequisite(s): ACC 371.

### **ACC 425 - Financial Statement Analysis and Valuation**

**(3)**

An applications-oriented course designed to develop the tools essential to evaluate the performance and assess the value of companies from a decision maker's perspective. Topics include industry and competitive strategy analysis, accounting analysis, ratio analysis, forecasting, earnings and cash based valuation models, and equity and credit analysis.

Prerequisite(s): FIN 335  
Senior Standing Only.  
Also offered as FIN 425

### **ACC 460 - Auditing**

**(3)**

A study of the attest functions of independent public accountants with emphasis on the philosophy of auditing. Topics include auditing standards, professional conduct, legal liability, internal control, audit evidence and techniques, and accountants' reporting responsibilities.

Prerequisite(s): ACC 371 or consent of instructor.  
Senior Standing Only.  
Pre or Corequisite: ACC 421 or consent of instructor.

### **ACC 489 - Internship in Accounting**

**(1-3)**

This course requires on-the-job experience in accounting where students exercise decision-making skills, problem-solving skills, communication skills, and accounting knowledge acquired in the student's academic program. In addition, students create a professional online e-portfolio including cover letter, resume, letters of recommendation, personal background, target industry information, work samples, and internship reports/evaluations. May be repeated for a maximum of six units. Graded Credit/No Credit.

Prerequisite(s): BUS 313 , Junior or Senior standing, and consent of instructor.

### **ACC 490 - Special Topics in Accounting**

**(3)**

Study in a special topic to be determined by the school. Open to juniors and seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **ACC 491 - Independent Studies in Accounting**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for the study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division

students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Art and Design**

### **ART 100 - Introduction to Art (GE)**

(2)

An introductory art orientation course dealing with the philosophy of art, language of design, aesthetics, art criticism, and a basic understanding of the Western and Non-Western artistic heritage. Offered on a Quad basis.

### **ART 102 - Fundamentals of Art (GE)**

(3)

Introductory course in the principles and elements of design as they apply to basic art skills and media, aesthetic awareness, art criticism, and applications in the fine, applied, and multicultural arts. Provides hands-on art experiences. This course does not count toward Visual Arts or Graphic Design majors.

### **ART 103 - Two-Dimensional Design**

(3)

Introduction to two-dimensional design theories and criticism. Exploration of art techniques and media used in two-dimensional compositions. Applications in Non-Western art forms.

### **ART 104 - Three-Dimensional: Composition and Space Design**

(3)

Introduction to the practice of three-dimensional design, theories, and criticism. Emphasis on the formal aspects of design including composition, balance, and space. Applications to sculpture, architecture, and industrial design.

### **ART 115 - Drawing I**

(3)

Introduction to the materials, techniques, styles, historical influences, and compositional structures of drawing, with an emphasis on perceptual skills.

### **ART 200 - History of Art I (GE)**

(3)

A survey of Western and Non-Western art history and styles through the study and criticism of painting, sculpture, and architecture from ancient civilizations to the Renaissance period.

**ART 201 - History of Art II (GE)**

**(3)**

A survey of Western and Non-Western art history and styles, from the Renaissance to the modern period. Offered every spring.

**ART 202 - Introduction to Computer Graphics**

**(3)**

Introductory experiences in the creation and production of computer-generated images. Includes the use of graphics software to combine image, text and technology; including Adobe Illustrator, Adobe InDesign and Adobe Photoshop.

Prerequisite(s): ART 103.

**ART 203 - Graphic Design I: Visual Symbolism**

**(3)**

Introduction to visual form-making in graphic design through use of symbols, type, and imagery. Exploration of design applications, techniques, issues, and media fundamental to the graphic design profession.

Prerequisite(s): ART 103, ART 115, ART 202 or concurrent.

**ART 206 - Experimental Drawing Studio**

**(3)**

Emphasizes the technical and expressive qualities of drawing as a finished work of art. Focus is given to aesthetics, composition, historical influences, non-traditional and experimental techniques.

Prerequisite(s): ART 115 or Consent of Instructor

**ART 210 - Painting: Color and Technique**

**(3)**

Introduction to the techniques, expressive qualities, and criticism of oil painting media.

Prerequisite(s): ART 103, ART 115 or Consent of Instructor.

**ART 221 - Photography: Darkroom and Film**

**(3)**

Introduction to camera and image utilizing traditional film based photochemical processes. Emphasis on camera skills, film formats, lighting, and darkroom based printing.

Prerequisite(s): ART 102 or ART 103.

**ART 222 - Sculpture: Materials and Fabrication**

**(3)**

Beginning sculpture techniques in a variety of media. Emphasis is on contemporary art approaches and issues.

Prerequisite(s): ART 104 or Consent of Instructor.

**ART 223 - Printmaking I**

**(3)**

Processes and techniques of printmaking. Includes intaglio, relief, or planographic media. Explores Western and Non-Western influences on printmaking imagery and techniques.

Prerequisite(s): ART 103, ART 115.

**ART 226 - Photography: Digital**

**(3)**

Introduction to the camera and image utilizing digital technology. Emphasis on camera skills, digital darkroom techniques, lighting, and digital printing.

Prerequisite(s): ART 103 or Consent of Instructor.

**ART 303 - Graphic Design II: Typography**

**(3)**

Examination of typography as a design tool. Exploration of visual hierarchy, principles of contrast, verbal messages, and communicative models. Development of computer skills used in the production of graphic forms.

Prerequisite(s): ART 103, ART 115, ART 203, ART 202.

**ART 304 - Modern Art History**

**(3)**

Studies of modern art movements from the middle of the 19th century through the middle of the 20th century. Includes applications to art criticism, aesthetics, and Non-Western influences on modern art.

Prerequisite(s): ART 200 or ART 201.

**ART 305 - Contemporary Art History**

**(3)**

Exploration of contemporary art with reference to historical developments from the mid-20th century to the present. Aesthetics, criticism, gender issues, and Non-Western influences are also explored.

Prerequisite(s): ART 200 or ART 201.

**ART 310 - Painting II**

**(3)**

Painting in oil and other media with emphasis on conceptual development and personal expression. May be repeated once for credit.

Prerequisite(s): ART 103, ART 115, ART 210 or Consent of Instructor.

### **ART 315 - Introduction to Interactive Web Design**

**(3)**

An introduction to history, theory, coding languages, best practices and industry standard workflow for interactive/web projects. Students apply user-centered design methodologies, design principles, and HTML and CSS programming languages to create web interface for interactive mobile and web publishing.

Prerequisite(s): ART 103, ART 202 or Consent of Instructor.

### **ART 319 - Visual Arts in the Classroom I**

**(3)**

Theory and practice in the teaching of the visual arts in early education through middle school years. Content is designed to meet expectations of the California Visual and Performing Arts Framework and California Visual Arts Standards.

Prerequisite(s): Junior standing (ART 100 or ART 102 and EDU 304 recommended).

### **ART 320 - Contemporary Housing Environments**

**(2)**

Planning the total home environment. Housing and interior design from a non-technical basis. This course offers credit in programs housed in the Department of Family and Consumer Sciences or the Department of Art and Design.

Prerequisite(s): FCS 115 OR ART 103 and ART 104.

### **ART 321 - Photography: Alternative Processes**

**(3)**

Explores alternative processes and techniques in photography such as liquid emulsions, alternative negative creation and alternative cameras. Emphasis on the photograph as contemporary art.

Prerequisite(s): ART 221 or ART 226 or Consent of Instructor.

### **ART 322 - Sculpture: Objects and Installation**

**(3)**

Contemporary sculpture techniques using a range of three-dimensional media. May be repeated once for credit.

Prerequisite(s): ART 103 or ART 104 or Consent of Instructor.

### **ART 323 - Printmaking II**

**(3)**

Technical and conceptual experiences in printmaking techniques that can include drypoint, intaglio, woodblock, collograph, or silk screen. May be repeated once for credit.

Prerequisite(s): ART 103, ART 115, ART 223.

### **ART 325 - Non-Western Art History**

**(3)**

Studies in Non-Western visual art forms. Students explore art works from around the world through classroom activities and fieldwork assignments at local art museums and institutions with Non-Western art collections. Students also participate in 3 hours per week of field work assignments at local art museums and institutions with Non-Western art collections.

### **ART 326 - Photography: Contemporary Images**

**(3)**

Explores conceptual applications of technology in photography and the merging of digital and chemical techniques. Emphasis on the photograph as contemporary art.

Prerequisite(s): ART 103, ART 202, and ART 221 or ART 226 or Consent of Instructor.

### **ART 330 - Illustration I**

**(3)**

An introductory course in illustration with an emphasis on concept, individual expression, and the development of technical skills in a variety of media. Students focus on the process of taking a project from thumbnails and roughs, through to finished art. Students are exposed to a variety of areas of illustration: advertising, editorial, institutional, and corporate.

Prerequisite(s): ART 103, ART 115 or Consent of Instructor.

### **ART 331 - Illustration II**

**(3)**

Illustration designed to increase visual vocabulary, conceptual skills, development of technical abilities in traditional and digital media, and understanding of professional practices. May be repeated once for credit.

Prerequisite(s): ART 202

### **ART 333 - Graphic Design III: Branding and Identity Programs**

**(3)**

An investigation of the strategies for designing a brand identity program across media. Students will use a comprehensive design process including research analysis, development, and organization to create a large-scale brand identity program. All aspects of context, content, design, production, and best practices are addressed in a semester long project.

Prerequisite(s): ART 103, ART 115, ART 203, ART 303.

### **ART 335 - Design History: Industrial Revolution to Contemporary Design**

(3)

An examination of the history, process and practice of design from the late 19th century to the new millennium. Objects, designers, history and culture which led to the birth of the profession of design are addressed along with its sources in art, architecture, science, and industry.

### **ART 341 - Philosophy of Art**

(3)

Classical and recent theories of beauty and art, with selected coverage of such concepts as aesthetics, expression, representation, and criticism.

Prerequisite(s): PHL 201.

### **ART 345 - Life Drawing**

(3)

Advanced procedures applied to drawing the human figure. Emphasis on contemporary and traditional styles, techniques in a variety of media, human anatomy, and historical influences.

Prerequisite(s): ART 115.

### **ART 390 - Advanced Studio Practice**

(3)

Studio practice course for visual art students. Emphasis is placed on contemporary art strategies and theoretical issues. This course is required for all Visual Arts majors. May be repeated once for credit.

Prerequisite(s): One upper division art/design studio course and junior standing or consent of instructor.

### **ART 420 - Contemporary Studio Seminar**

(3)

An advanced level seminar. Exploration of contemporary art media, critical and theoretical issues, including multi-cultural, and gender influences. Also addresses professional strategies and practices. Required for all Visual Arts majors.

Prerequisite(s): Junior standing.

### **ART 440 - Independent Studies in Art**

**(1)**

Private art lessons in advanced studio art or graphic design experiences. May be repeated for credit.

Prerequisite(s): Consent of instructor.

### **ART 450 - Interactive Web Design**

**(3)**

Learn advanced web HTML and CSS programming languages, user-centered experience theories (UX) and methods to inform structure and styling. Emphasis is placed on learning object-oriented approaches to develop dynamic/reusable rich media modules combined with data applications for interactive mobile and web publishing.

Prerequisite(s): ART 315.

### **ART 455 - Visual Arts in the Classroom II**

**(3)**

Theory and practice in the teaching of the visual arts in the schools. Content is designed to meet expectations of the California Visual Arts Standards and focuses primarily on middle through high school levels. Each student is required to prepare a final portfolio of the semester's work. Students are required to spend a minimum of 16 hours of observation time in a public school art classroom during the semester.

Prerequisite(s): Senior standing, EDU 304 (or co-requisite), 3 upper-division Art courses.

### **ART 466 - Senior Studio Exhibition or Research Preparation**

**(3)**

Visual Arts majors in studio areas or art history begin capstone work for a senior art exhibition or art history research project.

Prerequisite(s): Completion of, or concurrent enrollment in ART 390, ART 420.

### **ART 468 - Graphic Design Portfolio Preparation**

**(3)**

Investigate the process of building a comprehensive professional portfolio across media. Human-centered design research methods and processes are introduced and applied. Students design for and with communities to build empathy and understand the people they're serving. They iterate scores of ideas to create innovative design solutions that meet human need and promote positive social engagement.

Prerequisite(s): ART 333, senior standing.

### **ART 470 - Internship**

**(1-3)**

Students observe and participate in art or design-related professional settings under qualified supervisors. May be repeated for a maximum of six units. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor.

### **ART 471 - Graphic Design Portfolio Review**

**(3)**

Investigate the process of building a comprehensive professional portfolio across media in this advanced level senior capstone course. Learn and practice using human-centered research methods culminating in a portfolio reviewed by faculty and design professionals.

Prerequisite(s): ART 468.

### **ART 472 - Exhibition or Research Preparation**

**(3)**

Visual Arts majors complete and present their capston exhibition or research project in their final semester. Work is completed under faculty supervision and reviewed by a panel of art faculty and professionals.

Prerequisite(s): ART 466.

### **ART 490 - Special Studies in Art**

**(1-3)**

Studies in selected art topics by advanced art or graphic communications students. Offered in small group seminar format or independent study. May be repeated for a maximum of six units.

Prerequisite(s): Consent of department chair.

## **Athletic Training**

### **ATR 102 - Risk Management and Emergency Response**

**(1)**

Prevention, recognition, and management of health emergencies.

Corequisite(s): KIN 101.

### **ATR 102L - Risk Management and Emergency Response Laboratory**

**(1)**

Skill aquisition in the techniques required of the emergency medical responder. Laboratory instruction on techniques of

first aid, cardiopulmonary resuscitation, oxygen administration and emergency care for illness and spine injured patients.  
**Required of Athletic Training Majors. Special Fee.**

Corequisite(s): ATR 102 and KIN 101

### **ATR 290 - Clinical Internship I**

**(3)**

Instruction, practice, and supervision in the clinical aspects of Athletic Training by a Certified Athletic Trainer/Clinical Instructor in an off campus setting. This is an equipment-intensive course. Special Fee.

Prerequisite(s): Admission to ATEP.

### **ATR 291 - Clinical Internship II**

**(3)**

Instruction and supervision in the clinical aspects of Athletic Training by a Certified Athletic Trainer/Clinical Instructor. This is a lower-extremity focused course. Special Fee.

Prerequisite(s): Admission to ATEP and consent of instructor.

### **ATR 385 - Pathology of Injury and Illness**

**(3)**

An in-depth study of the etiological factors and care of injury and illness. Mechanisms of injury, pathology of illness, topographical appearance, imaging technology for assessment, implications for return to activity and long term health sequelae serve as the matrix for study of pathology. Psychology of injury and illness is studied.

### **ATR 387 - Assessment of Lower Extremity Pathology**

**(3)**

Through the systematic application of the HIPS method of assessment injuries of the pelvis and lower extremity are studied. Mastering clinical note taking and clinical role playing in lab setting allow students to practice neuromusculoskeletal injury assessment.

### **ATR 388 - Assessment of Head, Spinal, and Upper Extremity Pathology**

**(3)**

Through the systematic application of the HIPS method of assessment injuries of the axial skeleton, central nervous system, thorax, abdomen, and the upper extremity are studied. Clinical note taking must be mastered. Clinical role playing in lab setting allows students to practice neuromusculoskeletal injury assessment.

### **ATR 390 - Clinical Practicum I**

**(3)**

Advanced practice and supervision in the clinical aspects of Athletic Training by a Certified Athletic Trainer/Clinical

Instructor in a collegiate setting. Special Fee.

Prerequisite(s): ATR 291

**ATR 391 - Clinical Practicum II**

**(3)**

Clinical experience in a collegiate setting under the supervision of a Certified Athletic Trainer/Clinical Instructor. Emphasis is on therapeutic modalities and nutrition. Special Fee.

Prerequisite(s): ATR 390 and consent of instructor.

**ATR 410 - Therapeutic Exercise**

**(3)**

Theory and practice of active therapeutic techniques including manual, William's, and McKensie therapies, proprioceptive neuromuscular facilitation and progressive resistance.

**ATR 415 - Therapeutic Modalities and Pharmacology**

**(3)**

This course examines the use, physiological effects and contraindications of thermal, electrical, acoustic, and cryogenic modalities. Lab fee. Special Fee.

**ATR 420 - Pharmacology**

**(1)**

Study of drug classifications and medico-legal aspects of therapeutic and pharmacological treatments.

**ATR 460 - Management of Allied Health Care**

**(3)**

Leadership theory and practices in allied health care. Trends in national and international health care.

**ATR 493 - Clinical Preceptorship I**

**(2)**

Advanced clinical experience in orthopedic surgery and sports medicine clinic under the supervision of an orthopedic surgeon and Certified Athletic Trainer/Clinical Instructors. General medical emphasis.

Prerequisite(s): Admission to the ATEP.

**ATR 494 - Clinical Preceptorship II**

**(1)**

Advanced clinical experience in family medicine. Includes capstone clinical experience and mock certification examination. General medical emphasis.

Prerequisite(s): Admission to the ATEP.

## **Bible**

### **BIB 101 - Old Testament History and Religion (GE)**

(2)

Within the context of the history of Israel, an overview of the literature of the Old Testament with special attention to its literary history and theological themes. Offered fall, spring, and summer.

### **BIB 102 - New Testament History and Religion (GE)**

(3)

Within the context of Christian origins, an overview of the canonical literature of the New Testament with special attention to its literary history and theological themes. Offered fall, spring, and summer.

### **BIB 240 - Reading Scripture Faithfully**

(3)

An exploration of the methods and approaches for engaging the Bible faithfully in relationship to Christian faith and practice; its nature, context, and origins; and its reception in global contexts, with attention to justice, gender, race, and class. Offered annually.

Prerequisite(s): Either BIB 101 or BIB 102 .

### **BIB 301 - Jesus and the Gospels: Four Portraits of One Christ**

(3)

A study of the content, theological perspectives, relationships, and reception of the canonical Gospels. This class asks the driving questions: Who is Jesus? How do the Gospels reveal the life, ministry, and death of Jesus? The heart of the course is growing in understanding of and reverence for the Christ of history and faith. Offered alternate years.

Prerequisite(s): Either BIB 101 or BIB 102.

### **BIB 302 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference**

(3)

How do followers of Christ live in step with the Holy Spirit? A study of Paul's letters to far-flung churches around the ancient Mediterranean, most of which he founded and nurtured as a missionary pastor. Offered alternate years.

Prerequisite(s): Either BIB 101 or BIB 102.

**BIB 314 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics**

**(3)**

A study of the prophetic phenomena in the Old Testament, setting each book in its historical and canonical context, with attention to how these books speak to ancient and contemporary issues related to power, gender, justice, and economics. Offered alternate years.

Prerequisite(s): Either BIB 101 or BIB 102 .

**BIB 335 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse**

**(3)**

This course studies the New Testament books about and addressed to the general church - Acts, Hebrews, the Catholic Epistles, the Johannine Epistles, and/or Revelation - and focuses in on a particular portion of these books. What are the varieties of expressions of faithfulness to God and God's own faithfulness expressed in early Christian churches? How do these foster the diversity of Christian communities today? Offered alternate years.

Prerequisite(s): Either BIB 101 or BIB 102 .

**BIB 378 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice**

**(3)**

A study of the psalms and wisdom literature from their ancient Near Eastern antecedents to second century Judaism and Christianity, with attention to the ongoing realities of grief, suffering, and injustice in the world. Offered alternate years.

Prerequisite(s): Either BIB 101 or BIB 102 .

**BIB 410 - Biblical Theology**

**(3)**

A study of the major theological themes of the Christian Scriptures in relation to Christian faith and practice. Offered alternate years.

Prerequisite(s): Either BIB 101 or BIB 102.

**BIB 413 - Old Testament Torah and Israel's History: God's Story and God's People**

**(3)**

An exegetical and theological study of Old Testament narrative and legal materials (Pentateuch, Deuteronomistic History, various writings) that introduces their basic content, movement, context, and significance. Attention also is paid to biblical and archaeological data related to the origins of Israel and its literature. Offered alternate years.

Prerequisite(s): Either BIB 101 or BIB 102.

**BIB 490 - Special Studies in Bible**

**(1-3)**

An investigation of a topic in biblical studies not otherwise covered in the curriculum. May be repeated to a total of six units.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

**BIB 495 - Seminar in Biblical Literature**

**(3)**

Advanced study in a topic in Bible. May be repeated up to a total of 6 units. Offered alternate years.

Prerequisite(s): Either BIB 101 or BIB 102 and permission of instructor.

**Biblical Languages**

**GRK 207 - Biblical Greek I (GE)**

**(4)**

A linguistic approach to the language of the New Testament providing students with sufficient knowledge to read selected passages from the Greek New Testament with the use of a grammar and lexicon.

**GRK 208 - Biblical Greek II (GE)**

**(4)**

A linguistic approach to the language of the New Testament providing students with sufficient knowledge to read selected passages from the Greek New Testament with the use of a grammar and lexicon.

Prerequisite(s): GRK 207

**HEB 205 - Biblical Hebrew I (GE)**

**(4)**

An introductory study of the syntax and vocabulary of biblical Hebrew, with Old Testament readings along with an introduction to the tools and methods of exegesis. Offered annually.

**HEB 206 - Biblical Hebrew II (GE)**

**(4)**

An introductory study of the syntax and vocabulary of biblical Hebrew, with Old Testament readings along with an introduction to the tools and methods of exegesis. Offered annually.

Prerequisite(s): HEB 205

## **Biology**

### **BIO 101 - Human Biology and Bioethics (GE)**

**(3)**

An exploration of assorted topics in human biology as they intersect with bioethical and sustainability issues of current interest in society. Topics include human physiology, health, reproduction, genetics, and ecology. Course examines the underlying scientific basis of specific examples and how they relate to everyday life. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts of biology. Offered every year.

Corequisite(s): BIO 101L

### **BIO 101L - Human Biology and Bioethics Laboratory (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO101. Offered every year.

Corequisite(s): BIO 101

### **BIO 102 - Environment and People (GE)**

**(4)**

A systematic overview of major topics in global ecology as they relate to environmental science and human use of natural resources. Includes such topics as sustainable development, population growth, food, agriculture, land degradation, urbanization, pollution, poverty, sanitation, health care, bio-diversity, war, and the implications for wise resource management, bioethics, economics, and governmental policy. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts. Lecture. Offered every year.

### **BIO 103 - Introduction to Biology (GE)**

**(3)**

Designed to meet the requirements for the California Multiple Subject Teaching Credential for teaching grades K-8 (but open to all students). The subject areas include zoology, botany, physiology, cell structure, ecology, genetics, and evolution. Course explores major themes in these subject areas as they relate to everyday life, ethical concerns, conservation issues, and common misunderstandings. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts of biology. Offered every year.

Corequisite(s): BIO 103L

### **BIO 103L - Introduction to Biology Laboratory (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO103. Offered every year.

Corequisite(s): BIO 103

**BIO 104 - Biotechnology and Society (GE)**

(4)

An examination of current topics in biotechnology as they impact society, bioethics, and sustainable living. Course addresses the questions "What is biotechnology?", "How does it work?", and "How does it affect our lives?". Topics may include genetic engineering, gene amplification, genome projects, gene therapy, DNA fingerprinting, cloning, assisted reproductive technology, genetic screening, recombinant DNA, knock-outs, AIDS research, and GM foods. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts of biology. Lecture.

**BIO 105 - Ecology and Conservation (GE)**

(3)

A wide-ranging exploration of major topics in ecological science relating to current issues in conservation biology. Drawing from academic and applied fields, the course examines major concepts in conservation biology and how they impact society, public policy, wise management of natural resources, and ethical choices encountered in everyday life. Focus topics include biodiversity, habitat destruction, exotic species introductions, human harvesting, protected areas, and future prospects. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts. Offered every year.

Corequisite(s): BIO 105L

**BIO 105L - Ecology and Conservation Laboratory (GE)**

(1)

An inquiry-based laboratory that is a co-requisite for BIO105. Offered every year.

Corequisite(s): BIO 105

**BIO 130 - Human Anatomy and Physiology I (GE)**

(4)

The first course of a two-semester sequence which examines the human body from an integrated perspective. Topics include an introduction to chemistry and cell function, tissue types, skeletal system, muscular system, and nervous system. Does not count for credit in the Biology major. Lecture and lab. Offered every year.

Pre or Corequisite: CHE 103 or CHE 152.

**BIO 140 - Human Anatomy and Physiology II**

(4)

The second semester of a sequence which examines the human body from an integrated perspective emphasizing the interrelationship of structure and function. Topics include sensory and autonomic nervous system, endocrine system

and reproduction, cardiovascular system, immune system, respiratory system, digestive system, and urinary system. Does not count for credit toward the Biology major. Lecture and lab. Offered every year.

Prerequisite(s): BIO 130; CHE 103, or CHE 152.

### **BIO 210 - Cell Biology and Biochemistry (GE)**

(4)

An introduction to the principles of cell biology, molecular biology, and biochemistry. Topics include the chemical basis of life, basic membrane functions and membrane transport, basic metabolic pathways including cellular respiration and photosynthesis, cell division, and expression of the genetic material. Lecture and lab. Offered every semester.

Prerequisite(s): Must have a previous course in high school or university-level chemistry.

### **BIO 211 - Ecological and Evolutionary Systems (GE)**

(4)

An introduction to the principles of ecology, evolutionary biology and sustainability. Lecture and lab. Offered every semester.

### **BIO 212 - Organismal Biology**

(3)

Principles of animal and plant structure, function, and diversity. Lecture and lab. Offered every year.

Prerequisite(s): BIO 211.

### **BIO 220 - Microbiology of Infectious Diseases**

(4)

A study of microbial physiology, the diseases associated with infections by certain pathogenic microbes and the vertebrate response to microbial infections. Does not apply toward the Biology major. Lecture and lab. Offered every year.

Prerequisite(s): CHE 103; BIO 140 (may be taken concurrently).

### **BIO 312 - Applied Plant Biology**

(2)

A study of plant structure, function and phytochemistry through an examination of economically and culturally important plants, including plants for medicine, food, energy, fiber and building materials. Topics include environmental plant physiology, biotechnology, plant propagation, medicinal botany, and sustainable land use. Lecture, lab and fieldwork. Offered as a Quad Course.

Concurrent: BIO312L

Pre or Corequisite: BIO212  
Recommended: MTH 203 or MTH 363.

**BIO 315 - Microbiology**

(3)

An in-depth exploration of the world of microscopic organisms, including their diversity, physiology, biochemistry and ecology. Emphasis is on prokaryotes, but also some discussion of microscopic eukaryotes and viruses. Lecture and lab.

Prerequisite(s): BIO 210 and BIO 345.

**BIO 323 - Introduction to Oceanography**

(3)

An introduction to the interdisciplinary study of the oceans, including survey of geological, chemical, physical and biological oceanography. Includes consideration of current research methods and exploration of marine systems. Lecture, lab, and field work.

Prerequisite(s): BIO 211.

**BIO 325 - Insect Biology**

(3)

An integrative approach to the diversity, structure, physiology, development, behavior, social dynamics, and ecology of insects, the most abundant and successful group of land animals. Also covered is the impact of insects on human health and agriculture. Lecture, lab, and fieldwork.

Prerequisite(s): BIO 211.

**BIO 333 - Marine Biology**

(3)

The study of life in the oceans, including the ecology, structure, function and adaptations of marine organisms to their environment. Lecture, lab and fieldwork.

Prerequisite(s): BIO 211.

**BIO 340 - Field Biology: Neotropical Ecology**

(2)

A field oriented course that introduces students to the ecology and biology of the New World Tropics. The course begins during the spring semester, and continues with a 2-week field immersion trip to Costa Rica in early May. We visit some of the most intense biodiversity hotspots in Central America. Through readings, lectures, student presentations, and field trips, we explore the plants and animals of the tropics and investigate the ecological and cultural complexities of conserving them. Relevant issues of culture, language, public policy, and stewardship will also be covered.

Prerequisite(s): BIO 211.

### **BIO 345 - Genetics**

(4)

The study of the inheritance, organization, expression and variability of genes. Lecture and lab. Offered every year.

Prerequisite(s): BIO 210. A grade of "C" or better in BIO 210 or instructor consent.

### **BIO 350 - Advanced Cell Biology**

(3)

An in-depth study of the structure and function of eukaryotic cells. Topics include various aspects of subcellular structure, cytoskeleton dynamics and regulation, the mechanism of cell motility and intracellular transport cell adhesion, cellular signal transduction mechanisms, regulation of cell division and cancer. The laboratory provides exposure to important current methodologies. Lecture and lab.

Prerequisite(s): BIO 210 and BIO 345.

### **BIO 352 - Research Methodology**

(2)

This course builds upon the basis of the scientific method that students are exposed to as freshmen. It focuses on teaching students how to develop biological questions, search databases to obtain background information, design scientific experiments, and analyze data. The course will focus more specifically on how research data is obtained, how experimental knowledge and data are dispersed amongst the scientific community, and how these data are used as a base for correlating new data and upon which new experimentation is based. Lecture and laboratory.

Prerequisite(s): BIO 345

### **BIO 363 - Conservation Ecology**

(3)

An examination of the key concepts and issues at the intersection of conservation biology and ecology, including ethics, value of biodiversity, extinction vortices, habitat loss, fragmentation, over harvesting, invasive species, climate change, tropical cascades, pollution and dead zones, disease and human health, protected areas and poaching, biological corridors, restoration, economic valuation, community-based conservation and sustainable development. The course will incorporate review of case studies, analysis of journal articles, exploration of local habitats and conservation issues, critique of current events and development of an original field project that combines field techniques and literature review. Lecture, lab, and field work. Offered every year.

Prerequisite(s): BIO 211

Recommended: BIO 212

### **BIO 380 - Molecular Biology**

(3)

A study of the regulatory mechanisms that govern gene expression in eukaryotic and prokaryotic cells and their viruses. Alterations of normal eukaryotic genetic regulatory mechanisms resulting from the transformed (cancerous) state also are discussed. Laboratory includes practical experience with the methodologies of modern genetic engineering. Lecture and lab. Offered every year.

Prerequisite(s): CHE 152 and BIO 345.

### **BIO 390 - Immunology**

(3)

Introduction to the immune system with an emphasis on mammalian models. The course focuses on the cellular and molecular regulation of the immune system in health and disease. Topics include recognition of antigen, development of lymphocyte repertoires, and innate and adaptive immune responses. Also included are discussions of the immune system's responses to cancer cells, tissue transplants, and allergenic substances. Lecture and lab.

Prerequisite(s): BIO 380 or consent of instructor.

### **BIO 400 - Developmental Biology**

(3)

An analysis of mechanisms of early development of invertebrates and vertebrates. Includes a study of the cellular, molecular, and genetic factors that influence cell differentiation and the determination of the body plan, as well as a study of the morphogenesis of selected organ systems. The laboratory uses a variety of model organisms to study normal and abnormal development. Lecture and lab.

Prerequisite(s): BIO 380.

### **BIO 410 - Vertebrate Biology**

(3)

Taxonomy, behavior, distribution, and ecology of the vertebrates and a comparative study of their morphologies. Lecture and lab.

Prerequisite(s): BIO 211.

### **BIO 423 - Advanced Human Physiology**

(3)

This course examines how different organ systems work and interact with each other to maintain homeostasis in the human body. The course specifically examines metabolism, the digestion, the nervous system, endocrinology, the muscular system, respiration, the cardiovascular system, and the urinary system. Lecture and lab.

Prerequisite(s): BIO 212 and CHE 294, or instructor consent (Cell and Molecular Biology or Organismal minors). MTH 203 or MTH 363 recommended.

### **BIO 430 - Animal Behavior**

**(3)**

An exploration of the behavioral biology of animals, including behavior genetics, physiological mechanisms, development, learning, neuro-physiology, ecology, reproduction, and social behavior; insights from ethology, psychology, behavioral ecology, and sociobiology are also studied. Labs emphasize various aspects of behavioral research in field settings and students conduct their own research projects. Lecture and lab.

Prerequisite(s): BIO 211.

#### **BIO 450 - Advanced Biochemistry**

**(4)**

Detailed analysis of protein and membrane structure. Includes quantitative approaches to the study of enzymes, catalytic mechanisms of enzymes, and a survey of the major metabolic pathways of carbohydrates, lipids, amino acids and nucleic acids. Lecture and lab. Offered every year.

Prerequisite(s): BIO 210 and CHE 294 .

Also listed as CHE 450.

#### **BIO 470 - Neuroscience**

**(3)**

A study of the nervous system at the molecular, cellular and intercellular levels with the goal of understanding the generation and control of thoughts and behavior. Laboratory exercises examine sensory transduction, CNS function, synaptic physiology, behavior and neuroanatomy. The relationship of brain and mind are examined in discussions of nervous system development, intelligence, memory, patho-physiology, sexuality and gender identity, and religious faith and ethics. Lecture and lab.

Prerequisite(s): BIO 140 or BIO 212 or BIO 423, or PSY 301, or consent of instructor.

#### **BIO 473 - Experimental Marine Ecology**

**(3)**

A field-oriented course that explores aspects of marine ecology within the context of coastal communities, including ecological relationships within the marine environment, factors influencing community structure, and biogeography. A central component of the course will be an independent project with experimental design. Lecture, lab, and fieldwork.

Prerequisite(s): BIO 211; BIO 323 or BIO 333

#### **BIO 490 - Internship in Biology**

**(1-3)**

Authentic work experience in jobs that are oriented to the field of biology and that include responsibility for decision making, problem solving, and the use of techniques, skills, and knowledge acquired in the classroom. May be repeated to a maximum of three units. Offered every year. Credit/No Credit

Prerequisite(s): Junior or Senior standing. Consent of department chair and faculty advisor.

### **BIO 495 - Special Studies in Biology**

**(1-3)**

Individual study in depth of a selected biology topic under the direct supervision of a member of the faculty. Offered every year.

Prerequisite(s): Consent of instructor and department chair.

### **BIO 497 - Biology Seminar**

**(1)**

Examination and discussion of selected biological issues with an emphasis on the relationship between Christian faith and scientific study. Course is to be taken by Biology, Biology-Chemistry and Environmental Science majors during their last semester prior to graduation. Offered every year.

Prerequisite(s): Senior standing as a Biology or Biology-Chemistry major or Environmental Science major.

### **BIO 499 - Research in Biology**

**(1-3)**

Independent investigation, under the supervision of a member of the biology faculty. May be repeated for a total of six units, but no more three units may count toward upper-division requirements for graduation. Offered every year.

Prerequisite(s): Junior or Senior standing and consent of instructor.

## **Business**

### **BUS 100 - Introduction to Business**

**(3)**

This course provides a foundation for making good business decisions from a Christian perspective, focusing on more than the bottom-line. An introduction to contemporary business organizations including an examination of: the changing business environment; forms of business ownership; innovation and new product development; strategic management and value chain analysis; the five functions of management; marketing; operations and supply chain management; human resource management; accounting; finance; and information and communication management systems.

Note: Students who transfer or change to a business program as juniors or seniors (57 or more units), or students of any class standing who transfer in the lower division economics, accounting, and management course requirements (5 courses) will be required to take 3 units of upper division ACC/BUS/ECO/FIN/MGT/MKT in lieu of the BUS100 course requirement, excluding courses numbered 489 and 491.

Prerequisite(s): Restricted to freshmen and sophomores, or consent of instructor.

### **BUS 201 - Legal Environment of Business**

(3)

This course provides a comprehensive overview of legal issues encountered in business. Topics include the legal system, contracts, torts, product liability, intellectual and property rights, cyber crime, fraud, organizational forms, corporate formation and finance, securities law, business ethics and corporate governance.

#### **BUS 313 - Administrative Communication**

(3)

With an emphasis on speaking and writing in the business field, this course is designed to help students improve and polish their professional communication skills in the workplace. In this course, students learn the skills needed to secure employment and communicate effectively in a professional business setting. Specifically, students learn to create an impressive resume, write and deliver various professional reports, effectively interview for employment, compose professional routine and persuasive letters, conduct informational interviews, and create professional portfolios. Students exit the course with the professional communication skills needed to stand out in the business world and in the job search process.

Prerequisite(s): WRI 110 or equivalent.

#### **BUS 340 - Real Estate Principles and Practices**

(3)

This course provides an overview of real estate principles and practices. Topics include the economics of the real estate market, ownership and transfer of property, contracts, lessor and lessee relationships, escrow and title insurance, real estate finance, appraisal methodologies, agency, government control, taxes, management and development.

#### **BUS 475 - Sustainability in Action**

(3)

This course explores the principles and practices of sustainability in the home, in organizations, in local communities, and as national and world citizens. Topics include current environmental challenges, a critique of current cultural and societal practices as they impact the environment, the biblical foundation for creation care, and, in particular, practical steps that can be taken as individuals and in association with others that improve our care for creation.

Prerequisite(s): Junior or Senior standing or consent of instructor.

#### **BUS 480 - International Business**

(3)

This course provides an overview of business strategies, challenges and opportunities that exist in a global business environment. Students will explore the various economic, political, legal, social, and cultural contexts in which international businesses operate. In addition, students will develop a global business strategy, participate in a cross-cultural experience, and complete an in-depth research project on a specific country. Emphasis will be given to cross-cultural issues in management, marketing, and business ethics in an international setting.

Prerequisite(s): MGT 212

#### **BUS 489 - Internship in Business**

**(1-3)**

This course requires on-the-job experience in the business field where students exercise decision-making skills, problem-solving skills, communication skills, and business knowledge acquired in the student's academic program. In addition, students create a professional online e-portfolio including cover letter, resume, letters of recommendation, personal background, target industry information, work samples, and internship reports/evaluations. May be repeated for a maximum of six units. Graded Credit/No Credit.

Prerequisite(s): BUS 313, Junior or Senior standing, and consent of instructor.

### **BUS 490 - Special Topics in Business Administration**

**(3)**

Study in a special topic to be determined by the school. Open to Juniors and Seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **BUS 491 - Independent Studies in Business Administration**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for the study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Chemistry**

### **CHE 101 - Chemistry and Society (GE)**

**(4)**

Designed to introduce non-science students to the major ideas of modern chemistry and their relevance in contemporary society. Chemical principles are examined and applied to areas such as nutrition, medicine, agriculture, pollution, and energy issues. (Meets a general education requirement; does not count toward any Chemistry Department majors.)

Prerequisite(s): MTH 099 or equivalent.

### **CHE 102 - Chemistry in our Everyday Lives (GE)**

**(3)**

An introduction to basic principles of chemistry as they apply to our everyday lives. The course will include discussions on the chemistry of one or more major topics chosen by the instructor. (Possible topics include cooking, forensic science, health and nutrition, sustainable energy, or climate and the environment.)

Pre or Corequisite: MTH 099 or equivalent.

Corequisite(s): CHE 102L

**CHE 102L - Chemistry in Our Everyday Lives Lab (GE)**

**(1)**

A lab course designed for a hands-on exploration of basic principles of chemistry as they apply to our everyday lives.

Pre or Corequisite: CHE 102

**CHE 103 - Introduction to General, Organic, and Biological Chemistry (GE)**

**(4)**

Examination of those aspects of inorganic and organic chemistry that are pertinent to biology and chemistry. Examines the structures and metabolic reactions of biomolecules. Provides a background for nursing, family and consumer sciences and physical education majors. (Meets a general education requirement; does not count toward any Chemistry Department majors; must also take CHE 103L with this option.)

Corequisite(s): CHE 103L and MTH 099 or equivalent.

**CHE 103L - Introduction to General, Organic and Biological Chemistry Lab (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for CHE103.

Pre or Corequisite: CHE 103

**CHE 151 - General Chemistry Tutorial**

**(1)**

Tutorial session accompanying CHE 152. to reinforce problem solving skills necessary for the successful completion of General Chemistry. One hour per week. Can be waived by exam. Graded Credit/No Credit.

Corequisite(s): CHE 152.

**CHE 152 - General Chemistry I (GE)**

**(4)**

Study of the basic principles of modern chemistry. Emphasis on atomic and molecular structure, chemical bonding, gas laws, states of matter, and solutions. Course includes one three and one-half-hour laboratory each week.

Prerequisite(s): Satisfactory high school background or CHE 103 or PSC 110.

Corequisite(s): CHE 151 unless waived.

**CHE 153 - General Chemistry II**

(4)

Study of the basic principles of modern chemistry. Emphasis on chemical kinetics and equilibrium, acid base theory, thermodynamics, solubility, metals, and general descriptive chemistry. Course includes one three and one-half-hour laboratory each week.

Prerequisite(s): CHE 152.

### **CHE 201 - Serving Through Healing: An Introduction to Health Professions**

(1)

Course for students interested in the health professions of medicine, dentistry, optometry, pharmacy, and veterinary medicine. This course will introduce students to the various health professions and provide biblical and historical perspectives on healthcare and healing. This course will provide time for reflection to determine if the health professions are the right career or vocational path and practical application process guidelines and medical skills. Graded Credit/No Credit.

### **CHE 213 - Analytical Chemistry**

(3)

Examination of the theories and techniques of quantitative chemical analysis, with some emphasis on instrumental methods. Classical methods such as gravimetry, titrimetry, spectroscopy, electrochemistry, and chromatography will be discussed and used. Course includes one three-hour laboratory each week.

Prerequisite(s): CHE 153.

### **CHE 294 - Organic Chemistry I**

(4)

Study of organic compounds by functional group families with emphasis on structures, reactions, mechanisms, stereochemistry, and synthesis. Course includes one four-hour laboratory each week using microscale techniques.

Prerequisite(s): CHE 153.

### **CHE 304 - Organic Chemistry II**

(4)

Examination of basic organic chemistry from a mechanistic perspective and the use of synthetic procedures. The laboratory uses microscale techniques and provides hands-on experience with IR, NMR and GC/MS instrumentation. Course includes one four-hour laboratory each week using microscale techniques.

Prerequisite(s): CHE 294.

### **CHE 325 - Physical Chemistry I**

(4)

Study of classical thermodynamics as it is applied to physical and chemical systems. Includes discussion of the three

laws and their application to thermochemistry, reaction energetics and chemical equilibrium. Course includes one four-hour laboratory each week.

Prerequisite(s): CHE 213, PHY 142 or PHY 242, and MTH 144 or MTH 164.

### **CHE 326 - Physical Chemistry II**

**(3)**

Study of reaction dynamics and complex reaction mechanisms and an investigation of matter from a quantum chemistry perspective with particular emphasis on the theoretical concepts and their implications for molecular spectroscopy. Alternate years.

Prerequisite(s): CHE 213, PHY 142 or PHY 242, and MTH 144 or MTH 164.

### **CHE 327 - Physical Chemistry II Laboratory**

**(1)**

Designed to accompany CHE 326. Reaction dynamics and molecular structures are investigated using spectroscopic methods including ultraviolet-visible, fluorometry and FT-infrared instrumentation. One four-hour laboratory each week. Alternate years.

Corequisite(s): CHE 326.

### **CHE 351 - Organic Structure Elucidation**

**(2)**

Introduction to modern spectrometric techniques for elucidating the structure of organic compounds, including one- and two-dimensional nuclear magnetic resonance spectroscopy, infrared spectroscopy and mass spectrometry. Course includes a weekly laboratory. Offered on a Quad basis.

Prerequisite(s): CHE 304 and consent of instructor.

### **CHE 370 - Instrumental Analysis**

**(2)**

Analytical analysis using instruments such as gas chromatography, high performance liquid chromatography, ultraviolet-visible, FT-infrared and nuclear magnetic resonance spectroscopy, and mass spectrometry. Course includes one four-hour laboratory each week. Offered on a Quad basis.

Prerequisite(s): CHE 213 and consent of instructor.

### **CHE 450 - Advanced Biochemistry**

**(4)**

Detailed analysis of protein and membrane structure. Includes quantitative approaches to the study of enzymes, catalytic mechanisms of enzymes, and a survey of the major metabolic pathways of carbohydrates, lipids, amino acids and nucleic acids. Course includes one three-hour laboratory each week.

Prerequisite(s): BIO 210 and CHE 294.  
Also offered as BIO 450.

### **CHE 453 - Advanced Organic Chemistry**

(2)

Advanced study of organic reaction mechanisms including: the Hammett equation, isotope and substituent effects and orbital symmetry. Modern synthetic reactions are presented. Offered on a Quad basis. Alternate years.

Prerequisite(s): CHE 304 and consent of instructor.

### **CHE 454 - Advanced Organic Chemistry Laboratory**

(1)

Designed to accompany CHE 453. Emphasis on modern synthetic methods and purification of complex reaction mixtures. One four-hour laboratory each week. Offered on a Quad basis. Alternate years.

Corequisite(s): CHE 453.

### **CHE 466 - Bioinorganic Chemistry**

(2)

Development of significant topics in bioinorganic chemistry particularly those at the interface of chemistry and biology. Emphasis is placed on understanding the role of metals in biological systems such as enzymes and DNA. Offered on a Quad basis.

Prerequisite(s): CHE 304 or consent of instructor.

### **CHE 467 - Advanced Inorganic Chemistry Laboratory**

(1)

Designed to accompany CHE 468. Emphasis on the preparation, purification and characterization of main group and transition metal inorganic and organometallic compounds. One four-hour laboratory each week. Alternate years.

Pre or Corequisite: CHE 468

### **CHE 468 - Advanced Inorganic Chemistry**

(3)

The principles of inorganic chemistry, including symmetry, atomic and molecular structure, bonding theories, energetics, kinetics, and spectroscopy, are developed and applied to a range of inorganic compounds. Alternate years.

Prerequisite(s): CHE 326 or consent of instructor.

### **CHE 475 - Special Topics in Chemistry**

**(2)**

Discussion of chemical topics of special relevance to students and faculty. Possible topics include: statistical thermodynamics, group theory and molecular spectroscopy, enzyme kinetics, photochemistry, organometallic chemistry, organofluorine chemistry, medicinal chemistry, electrophilic and radical additions, and mechanistic aspects of water chlorination. Offered on a Quad basis.

Prerequisite(s): CHE 304 or consent of instructor.

### **CHE 490 - Internship in Chemistry**

**(1-3)**

Authentic work experience in jobs that are oriented to the field of chemistry and that include some responsibility for decision making, problem solving, and the use of techniques, skills, and knowledge acquired in the classroom. May be repeated to a maximum of three units. Graded CR/NC.

Prerequisite(s): Junior or Senior standing. Consent of department chair and faculty advisor.

### **CHE 495 - Chemistry Seminar**

**(1)**

Presentation of papers by students and visiting scholars, and attendance at off-campus seminars.

Prerequisite(s): Senior standing and consent of instructor.

### **CHE 499 - Research in Chemistry**

**(1-2)**

An independent investigation, under faculty supervision, of a specific problem at the frontier of a chemical field. Includes weekly discussion sessions. May be repeated up to a maximum of four units. Open to juniors and seniors.

Corequisite(s): Consent of instructor.

## **Chinese**

### **CHN 101 - Elementary Chinese (Mandarin) I (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

### **CHN 102 - Elementary Chinese (Mandarin) II (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the

language is emphasized in the classroom.

Prerequisite(s): CHN 101 or consent of the instructor.

## **Christian Ministry**

### **CMI 155 - Christian Formation and Ministry**

**(3)**

What is ministry? How are all Christians called to discipleship, faith formation, and service? What does the Christian tradition require from those granted authority of oversight in the Church? Students will learn from the various roles and offices of the church, to practice and teach others the classic Christian disciplines as a means of grace, and the importance of theological reflection for ministry. Offered annually.

### **CMI 300 - Teaching and Preaching the Bible**

**(3)**

Students will examine the teaching and preaching offices of the Church. Students will learn how the essentials of biblical interpretation (hermeneutics and exegetical method), theology, and an understanding of the "social location" of the local congregation for effective teaching and preaching. Offered alternate years.

Prerequisite(s): CMI 155

### **CMI 325 - Christian Care of Souls**

**(3)**

What is Christian Care? What did the early church mean by the "care of souls"? This course will explore the intersection between discipleship and pastoral care and its relation to and divergence from psychological counseling. Emphasis will be given to multi-generational and congregationally-based ways for spiritual nurture and care of individuals and families in need. Special attention will be given to spiritual direction and lay-led ministries. Offered alternate years.

Prerequisite(s): CMI 155

### **CMI 340 - Foundations for the Practice of Youth Ministry**

**(3)**

Students will explore approaches to the discipleship ministries for youth in the local church and parachurch organizations.

### **CMI 345 - Enacting Worship**

**(3)**

How do good theology, sound scriptural understanding, and sustaining pastoral care become enacted by a local congregation in weekly worship? This course will allow students to design and lead worship following specified

themes and liturgical patterns in a classroom setting with regular feedback. Offered annually.

Prerequisite(s): CMI 155 and CMI 400 or consent of instructor.

### **CMI 350 - Church as a Witness to the World**

**(3)**

What is the nature and mission of the church? The course explores biblical assumptions of missional theology and the social and contextual issues of a local congregation as they relate to evangelism, missions, social witness, and justice making. Offered alternate years.

Prerequisite(s): CMI 155

### **CMI 400 - The Christian Gathering: Scripture, Baptism, and Eucharist**

**(3)**

The most fundamental practice of the Christian tradition, from Jesus and the twelve, involves gathering in a particular spatial location. This course will examine two traditions of gathering: the Ministry of the Word and the Ministry of the Table. The course will examine varied worship traditions arising out of the different understandings and historic periods of the church. The course will emphasize the different manifestations of historical Christian practices like the church year, baptism, funerals, and the Lord's Supper and how to oversee these practices in alternative traditions. Offered alternate years.

Prerequisite(s): CMI 155

### **CMI 410 - Leading in Ministry**

**(3)**

How do Christians lead and equip others to further God's purposes? Attention is given to administration, team building, conflict resolution, and a biblical understanding of gifts, ministry roles and functions. The course also examines the pressures of ministry and the changing structures and forms of the church in American society. Offered alternate years.

Prerequisite(s): CMI 155

### **CMI 415 - The Church of the Nazarene: History and Polity**

**(3)**

Who are the Nazarenes? This course will identify the formative influences of the Methodist societies in 18th Century England and the distinct ways the Methodist way of life was adapted in Colonial America and gave rise to the 19th Century American Holiness Movement and the Church of the Nazarene. Attention will be given to the organization and ministry of the local, district and general church as articulated in the Manual of the Church of the Nazarene. Offered alternate years.

Prerequisite(s): CMI 155

### **CMI 420 - Compassionate Ministry in Local Context**

**(3)**

Students will be immersed and examine how the church worships and engages in works of mercy and devotion in a community-based intercultural context. Students will learn how to analyze congregational and community demographics, understand sociological dynamics and employ theological reflection in ministry. The course will examine the difference between non-profit ministry structures and congregationally-based, direct-action approaches to local ministry. Offered alternate years.

Prerequisite(s): CMI 155

### **CMI 425 - Youth and Family Ministry**

**(3)**

How do we lead so that children and youth will follow Christ? How are the gifts of the young employed in mission? How does the church equip families to support faith? This course will examine recent sociological studies of emergent adulthood and look at ministry practices designed to sustain the long term witness of the church through intergenerational ministries. Offered alternate years.

Prerequisite(s): CMI 155

### **CMI 450 - Internship**

**(3)**

Supervised on-site ministry to help students integrate theory and classroom experience with the practice of ministry. May be repeated up to a total of six units. Graded Credit/No Credit.

Prerequisite(s): BIB 101 or BIB 102 and CMI 155 and consent of instructor.

### **CMI 490 - Special Studies in Christian Ministry**

**(1-3)**

An investigation of a topic in Christian ministries not otherwise covered in the curriculum. May be repeated to a total of six units.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

## **Church History**

### **CHU 395 - The Christian Tradition (GE)**

**(3)**

A historical survey of the ideas, practices, and institutions of Christianity from the end of the New Testament period to the present, with attention to the Wesleyan-Arminian tradition. Offered every semester.

Prerequisite(s): BIB 101 or BIB 102.

## **Church Music**

### **CMU 201 - Instruments in Worship**

(2)

An introduction to the use of musical instruments in support of worship music. Topics covered include basic rehearsal techniques, transposition of parts, and basic instrumental arranging skills. Offered fall semester of even years.

### **CMU 202 - Multi-Media for Worship Ministry**

(2)

A practical introduction to media technology resources for music ministry. the course includes training in the use of audio and visual media such as lighting, sound reinforcement, and presentation software. Offered spring semester of odd years.

### **CMU 314 - Music and Worship**

(3)

A study of the nature of worship and the function of music as an aid to worship. A survey of the history and practice of church music; consideration of the role of music in worship and Christian education. A study of problems peculiar to the music program of the small and medium-size church. Offered fall semester of odd years.

### **CMU 315 - Church Music Administration and Materials**

(2)

Development of the church-wide program of music ministries; principles and administration of the music ministry in relation to other church departments. Study of materials and equipment for the program; organization of choirs and other music ministries. Offered spring semester of even years.

Prerequisite(s): CMU 314.

### **CMU 433 - Hymnology**

(3)

A survey of Christian hymnody, its historical patterns, covering the broad scope of hymnic literature, its environment, and the significant individuals contributing. Practical and critical classroom study and participation. Offered fall semester of even years.

### **CMU 451 - Internship in Church Music**

(2)

Supervised internship in a church situation. Offered on demand.

Prerequisite(s): Consent of instructor.

**CMU 490 - Special Studies in Church Music**

**(1-2)**

Intensive study of a selected problem, under the direction of a department faculty advisor. Offered on demand.

Prerequisite(s): Consent of department chair.

**CMU 495 - Church Music Seminar**

**(1-2)**

Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in class schedule. Offered on demand.

**Communication**

**COM 100 - Principles of Human Communication (GE)**

**(3)**

A survey of the human communication process. Emphasis is placed on intrapersonal, interpersonal, and public communication. Particular attention is paid to the preparation and presentation of speeches.

**COM 150 - Introduction to Media Communication**

**(3)**

Explores the development and influences of mass media (books, newspapers, magazines; film; radio, television, and internet) in contemporary society. Considers the rights and responsibilities of producers and consumers of mass communication.

**COM 175 - Scriptwriting for Television and Film**

**(3)**

A survey of the process, forms, and techniques for writing scripts for television and film. This includes advertising, documentary, corporate training and promotion, magazine, sports, variety, drama, and comedy.

**COM 190 - Interpersonal Communication**

**(3)**

Focuses on the social scientific study of dyadic (two-person) communication. Opportunities are given to integrate theory and practice in an effort to stimulate self-awareness and highlight taken-for granted aspects of interpersonal communicative behavior.

### **COM 195 - Media Literacy**

**(3)**

A critical approach to interpreting media messages is grounded in the study of how messages are constructed, how media industries function and how communication theory and research explain media impact on society. Emphasis is placed on making informed choices as a media consumer, and considering the impact of media from a Christian perspective.

### **COM 210 - Communication Practicum I**

**(1-2)**

Requirements vary according to the activity developed in consultation with the instructor. May be repeated up to a total of three units. Graded Credit/No Credit.

### **COM 220 - Small Group Communication**

**(3)**

Analysis of the communicative behavior of group members. Theory, methods, and practical application in developing the art of communicating effectively in a variety of task-oriented groups.

### **COM 231 - Argumentation and Debate (GE)**

**(3)**

A study of the development of argumentation from classical rhetoricians to contemporary research theories. Practical application of this study through participation in debates and other forensic experiences.

### **COM 243 - Introduction to TV and Film Production**

**(3)**

Fundamentals of studio and field TV and film production. This includes basic technical and creative aspects of camera, lighting, sound, graphics, producing, directing, and editing. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the campus cable TV channel.

### **COM 260 - Advanced Public and Professional Speaking**

**(3)**

Development of speaking skills for public and professional arenas, such as business, government, media, education and the ministry. Appropriate presentational technology is examined along with audience analysis and adaptation techniques.

Prerequisite(s): COM 100 or COM 231.

### **COM 265 - Introduction to Empirical Research in Communication**

**(3)**

This course is a survey of qualitative, statistical, and content analytic methods in communication research. The class includes an introduction to IRB protocols and forms, a review of APA style requirements, as well as the use of statistical software in data analysis. Not repeatable. Letter grading.

### **COM 275 - Audio Production**

(2)

A basic course that provides students with skills in writing and production of audio content for radio (e.g., commercials, promotional announcements, PSAs), and TV and film (multi-track recording, mixing, and sound effects). Course deals with announcing, acoustics, microphones, and remote broadcasts. Required for broadcast journalism majors and other students desiring to work at Point Radio.

### **COM 300 - Narrative and Documentary Film**

(3)

A survey of narrative and documentary motion pictures, from Edison and Lumiere to the present. Course covers the historical, structural, technological, and aesthetic trends of motion pictures through the viewing and analysis of selected classic films that exemplify these trends. Course also includes readings and online discussion about issues of Christian faith and film.

### **COM 310 - Nonverbal Communication**

(3)

Theory and research on nonverbal aspects of speech communication, emphasizing the importance of time, space, body language, touch and vocalics.

### **COM 312 - Gender and Communication (WS)**

(3)

A study of how the self-perception of men and women evolves as a function of cultural influences and the differences and similarities in the way each uses communication patterns.

### **COM 313 - Television News Production**

(3)

Combines principles of journalistic writing and reporting with field production techniques of television news. Students learn the basic concepts of reporting and producing a variety of television news stories, from simple anchor readers to complex packages.

Prerequisite(s): JRN 250 and COM 243.

Pre or Corequisite: JRN 312 - Television News Writing

Corequisite(s): JRN 312 and COM 313 are corequisites and must be taken in the same semester.

### **COM 315 - Oral Interpretation**

(3)

Analysis of techniques of oral interpretation to develop reading skills, with intensive practice in various literary forms (prose, drama, and poetry).

**COM 330 - Persuasion**

(3)

Study of the social scientific theory and practice of persuasion. Persuasion is situated within the broader notion of influence. Topics include persuasion tactics, audience analysis and research, and modern advertising practices.

**COM 340 - Organizational Communication**

(3)

A study of traditional, modern, and post-modern approaches to organizational communication as well as its functions, forms and consequences. Provides a theoretical overview of management theory and gives practical insights for communicating in a variety of organizations.

**COM 345 - Management Communication**

(3)

An in-depth analysis of the primary issues in management communication including leadership, conflict, decision-making, and ethics. Students explore the communication abilities, dilemmas, and challenges confronting organizational leaders.

**COM 350 - Electronic Media in Communication**

(3)

Critical examination of forces that shape the history and future of electronic media in the United States. Primary attention is given to the role of regulatory law, economics, and technology.

Prerequisite(s): COM 150.

**COM 365 - Intercultural Communication**

(3)

A study of intercultural principles, processes, and topics including: verbal and nonverbal communication, perception, cultural values and expectations, and media impact. Students develop an increased awareness, understanding, and appreciation of other cultures.

**COM 390 - Introduction to Public Relations**

(3)

An introduction to the theory and practice of public relations. This includes public relations roles, publics, research, media relations, special events, and an introduction to cases and campaigns of public relations. This course considers the process of public information dissemination in business, educational, and nonprofit organizational settings.

**COM 405 - Public Relations Cases and Campaigns**

**(3)**

This course involves the study and application of organizational policy objectives to public relations program development. It includes case studies from PR history as well as methods of audience research, data analysis and planning of strategic communication objectives. Students plan and execute a public relations program for an established organization.

Prerequisite(s): COM 390.

#### **COM 413 - Advanced Television News Production**

**(3)**

Provides students with the theory and organization of newscasts, as well as skills in conducting live news remotes, coordinating newscasts, supervising news personnel, anchoring, using news production software, and applying advanced reporting skills in various news situations.

Prerequisite(s): COM 313 and JRN 312.

#### **COM 414 - Long-Form Broadcast News**

**(3)**

Focuses on the development of skills at in-depth storytelling through radio and television news production. Students learn to research, script, and produce stories, while applying aural and visual news presentation techniques.

Prerequisite(s): COM 313 and JRN 312

#### **COM 420 - Communication Practicum II**

**(1-2)**

Continued application of communication concepts and skills. Requirements vary according to the activity developed in consultation with the instructor. Credit not applicable toward upper-division requirements in the department. May be repeated for up to a total of eight units. Graded Credit/NoCredit.

Prerequisite(s): COM 175 for Screenwriting; COM 243 for Production Project. Prior university experience in applied communication activities.

#### **COM 421 - Internship in Communication**

**(3)**

Participation in an internship supervised by departmental faculty. May be repeated up to a total of six . Graded Credit/No Credit

Prerequisite(s): Junior or Senior standing.

#### **COM 422 - Portfolio Construction**

**(1)**

Completion of a portfolio and supporting documentation for assessment and preparation for employment. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor.

### **COM 425 - Advanced Television Workshop**

**(1)**

Planning, production and presentation of television programming for multiple audiences. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the campus cable TV channel. Required of upperdivision students working as staff for campus television channel. May be repeated up to a total of six units.

Prerequisite(s): COM 243.

### **COM 435 - Advanced Audio Production**

**(1)**

Students are responsible for a minimum of 30-hours per semester of work, including music programming, news, sports, and station management. Required for students desiring to work for the student radio station. May be repeated up to a total of four units. Offered Spring Only.

Prerequisite(s): COM 275.

### **COM 442 - Field Television Production**

**(3)**

Television production and operations associated with field production including concepts and practices in scripting, producing, editing, and on-location directing with a single-camera format. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the campus cable TV channel.

Prerequisite(s): COM 243.

### **COM 443 - Studio Television Production**

**(3)**

Television production and operations associated with studio production including concepts and practices in scripting, producing, and directing for multi-camera studio production. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the campus cable TV channel.

Prerequisite(s): COM 243.

### **COM 450 - Communication Training and Development**

**(2)**

This course acquaints the prospective human resources trainer and/or consultant with the skills to design, implement, and assess communication instructional programs. Each participant in this experiential class develops a one-half day training program suitable for a professional audience.

Prerequisite(s): Junior or Senior standing, Managerial and Organizational Communication Major or consent of instructor.

#### **COM 460 - Rhetorical Theories and Models**

**(3)**

Development of rhetorical theory and rhetorical criticism, from ancient Greece through the present, as mechanisms for generating and understanding public address.

#### **COM 465 - Communication Theories and Research**

**(3)**

Survey of contemporary approaches to human communication emphasizing theory development, epistemological perspectives, meaning negotiation, and research methodology. Participants complete an original research project that is publicly presented in a poster session.

Prerequisite(s): JR or SR status and COM 265 OR Consent of Instructor

#### **COM 480 - Independent Study**

**(3)**

This course may be setup by special request and arrangement. In order to be considered students may submit a portfolio and a project proposal. Students with approved projects will be appointed a mentor who is a professional in the Hollywood industry to supervise the project. Projects could include further development of a portfolio or reel, critical research, or a senior thesis project. The independent study option is not guaranteed and is intended for students with experience in a specific area of cinema or those needing to complete a senior project for graduation. The number of independent studies offered each semester is determined by Los Angeles Film Studies Center (LAFSC) faculty, the availability of a suitable mentor, and approval from the department chair.

#### **COM 485 - Communication, Values, and Society**

**(2)**

Senior seminar series focused on value-driven approaches to communication, applying a Christian perspective to real world contexts. Required of all majors in the department.

Prerequisite(s): Senior standing.

#### **COM 490 - Special Studies in Communication**

**(1-3)**

Intensive study of a selected problem by an individual or group in the field of communication and theatre under the direction of a member of the department. May be repeated up to a total of six units.

Prerequisite(s): Consent of instructor.

#### **COM 492 - Independent Study**

**(1-3)**

Independent investigation, under the direct supervision of a faculty member, of a specific issue relevant to the study of communication.

## **Computer Information Systems**

### **ISS 342 - Project Management and Quality Assurance**

**(2)**

This course discusses the processes, methods, techniques and tools that organizations use to manage their information systems and software development projects. This course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. It also looks at techniques including unit testing for quality assurance. Alternating Years. Offered 2018-19.

Prerequisite(s): CSC 154

### **ISS 373 - Networking and Security**

**(3)**

This course provides an introduction to modern computer network technologies. Students gain an understanding of networking fundamentals including layering and the old OSI model, protocols, standards, and network services. LANS, MANS, WANS, Internet and wireless networks are covered. The class will also cover the basics of network security. The class includes hands-on activities. Alternating Years. Offered 2017-18.

Prerequisite(s): CSC 154 and Junior Standing.

### **ISS 392 - Topics in Cyber Security**

**(2)**

Study of an area of information or computer security otherwise included in the curriculum. Topics are determined by the needs and interest of the students and faculty involved. May be repeated up to a total of six (6) units.

Prerequisite(s): CSC 314 and consent of instructor.

### **ISS 403 - Information and Computer Security**

**(3)**

This course provides an overview of modern topics in information and computer security, including: network security, web security, compliance and operational security, threats and vulnerabilities, privacy and anonymity, application, data and host security, access control and identity management, cryptography. This class includes theoretical analysis and hands-on activities. Alternating Years. Offered 2017-18.

Prerequisite(s): CSC 314 and ISS 373

### **ISS 414 - Data Base Systems and Web Integration**

**(4)**

An introduction to database management systems covering data models (including relational, network, hierarchical, and object oriented), relational databases, query languages, relational database design, transaction processing, distributed databases, and physical database design. Students will see examples from both business and science. They will become familiar with analysis tools and gain experience accessing databases using Python scripts and web-based gateways. Students will also design web interfaces for data bases. Alternating Years. Offered 2017-18.

Prerequisite(s): CSC 154 .

### **ISS 472 - Internship in Information Systems**

**(2)**

A supervised experience in which the student works with industry professionals to gain experience with managing information systems. May be repeated to a total of four units. This course is graded Credit/No Credit only.

Prerequisite(s): Student must have taken at least two upper-division computer science or information systems courses for their major and consent of instructor.

### **ISS 481 - Senior Seminar in Information Systems**

**(1)**

This one-unit capstone course is a seminar in which faculty members, some guests and the students give lectures on topics of general interest in Information Systems. Graded Credit/No Credit.

Prerequisite(s): One of CSC 495 , CSC 498 , ISS 495 , ISS 498 , MTH 495 , MTH 498 , HON 498 or ISS 472 and Senior standing (or Junior standing if a December graduate).

### **ISS 495 - Service Learning in Computer Information Systems**

**(3)**

Students working in teams design and implement a project using a broad spectrum of information systems knowledge to meet the needs of a community organization or the university.

Prerequisite(s): Consent of instructor and Junior standing.

### **ISS 498 - Independent Research in Information Systems I**

**(2)**

Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, consent of instructor, and Junior standing.

### **ISS 499 - Independent Research in Information Systems II**

**(1)**

The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, ISS 498, and consent of instructor.

## **Computer Science**

### **CSC 111 - Computer Programming for the Absolute Beginner**

**(1)**

A gentle introduction to computer programming/scripting in the Python language for those with no prior programming experience. Topics include the use/purpose of programming in the context of different academic disciplines along with the basics of writing code. Students will learn to write simple programs using input and output, conditional statements, loops, and graphics. This class is for anyone who wants to join the coding conversation or to gain a background for more rigorous programming courses.

Prerequisite(s): MTH 099

### **CSC 143 - Introduction to Computer Programming**

**(3)**

Introduces the syntax of a high level programming language with emphasis on the programming environment and the use of the constructs of the language to write simple application programs. Topics include data types, sequential, conditional, and iterative statements, one and multi-dimensional arrays, simple graphical animation, the use of objects, and I/O. Programming assignments get progressively more complex and designed to demonstrate the use of computing in a variety of disciplines including the natural sciences. Lecture two hours and laboratory two hours each week.

Prerequisite(s): MTH 113 (or equivalent).

### **CSC 154 - Objects and Elementary Data Structures**

**(4)**

As a continuation of CSC 143, this course deals with more advanced computing constructs and ideas, reinforced in weekly labs. Topics include object-oriented design, inheritance, polymorphism, exception handling, and recursion, along with more intentional development and debugging strategies. Linked lists are introduced as a viable option for implementing basic ADT's. Students gain experience in the design of graphical user interfaces, event driven programming, and larger programming projects. Lecture three hours and laboratory two hours each week.

Prerequisite(s): CSC 143 with a grade of C- or higher.

### **CSC 252 - Data Structures in C++**

**(2)**

Students transition to the C++ language and are introduced to additional data structures, including queues, stacks, trees, and graphs considering their implementation with both arrays and linked lists. Concepts are reinforced through weekly programming assignments. Lecture three hours and laboratory two hours each week (this is a quad class). Annually

CSC252 is the first quad of CSC254.

Prerequisite(s): CSC 154 with a grade of C- or higher.

### **CSC 254 - Data Structures and Algorithms**

**(4)**

Standard data structures, including queues, stacks, trees, and graphs, as objects are defined and illustrated with associated dynamic storage management mechanisms. Introduces formal techniques to support the design and analysis of algorithms, focusing on both the underlying mathematical theory and practical considerations of efficiency. Topics include measuring the complexity of recursive and iterative algorithms, algorithmic strategies, the concept of intractability and the theory of NP. Emphasis is placed on non-numerical algorithms such as sorting, searching, graph and network algorithms both sequential and parallel. Concepts are reinforced through weekly programming assignments. Lecture three hours and laboratory two hours each week.

Prerequisite(s): CSC 154 with a grade of C- or higher.

### **CSC 302 - UNIX and Python Scripting for Computational Science**

**(2)**

An introduction to UNIX and Python scripting in the context of applications to scientific research. Students will become competent users of the UNIX operating system. They will learn to find and manipulate data from various file formats (including text, FASTA, HTML, XML) using regular expressions with UNIX and Python scripts. They will learn to use Python for data analysis and for more specialized purposes using third party modules including NumPy, BioPython, and Tkinter.

Prerequisite(s): CSC 143 with a grade of C- or better.

### **CSC 311 - R for Computational Science**

**(1)**

The software R will be introduced as a tool for numerical computation, visualization, and data analysis in science-related research. Various toolboxes will be explored. Students will gain experience in selecting and using the appropriate tool for the job.

Prerequisite(s): CSC 143 with a grade of C- or better.

### **CSC 312 - Operating Systems for Software Engineering Certificate**

**(2)**

A systems course focusing on structural design and services of operating systems, along with the use of both GUI and command-line interfaces. Special attention is paid to process management and concurrency. Offered on a Quad basis.

Prerequisite(s): CSC 252 or CSC 254.

### **CSC 314 - Operating Systems**

(4)

A systems course focusing on operating systems, topics include basic operating system design, process management, device management, memory management, and file systems. Students are introduced to the basics of software evolution, reliability, concurrency, security and protection in the context of single-core, multi-core, distributed, and virtual environments. Class members gain experience using both GUI and command-line interfaces. In the course of implementing the CPU scheduling simulation, students understand the importance of thorough system testing and attention to system specs as they try to make parts of their systems work with those designed by their teammates.

Prerequisite(s): CSC 254 or CSC 252 .

### **CSC 322 - Data Management for Computational Science**

(2)

An introduction to data management in the context of scientific research. Students will explore the data storage and manipulation requirements for biology, chemistry, and physics and learn to choose the correct data management tool for a given situation. Tools include Microsoft Excel (with VBA for interface design), R, MATLAB, and Microsoft Access. Students will learn to design, create, and query relational databases using a popular database management system and SQL query language.

Prerequisite(s): CSC 302 or instructor permission.

### **CSC 323 - Software Engineering**

(3)

This course offers an in-depth treatment of the software development process. Software analysis and design study emphasizes an object-oriented approach that is introduced and contrasted with traditional design methodologies. CASE tools are used during the design process. Lecture two hours and laboratory two hours each week. Alternating Years. Offered 2018-19.

Corequisite(s): CSC 254.

### **CSC 354 - Design and Analysis of Algorithms**

(4)

Introduces formal techniques to support the design and analysis of algorithms, focusing on both the underlying mathematical theory and practical considerations of efficiency. Topics include measuring the complexity of recursive and iterative algorithms, algorithmic strategies, the concept of intractability and the theory of NP. Emphasis is placed on non-numerical algorithms such as sorting, searching, and graph and network algorithms both sequential and parallel. Alternating Years. Offered 2018-19.

Prerequisite(s): CSC 254 and MTH 343.

### **CSC 394 - Programming Languages**

(4)

This course in programming languages covers language design issues and language translators. Laboratories give students a practical understanding of programming language concepts as well as give experience in programming using several programming languages. Lecture three hours and laboratory two hours each week. Alternating Years. Offered

2017-18.

Prerequisite(s): CSC 254 and MTH 343.

### **CSC 412 - Topics in Computer Science**

**(2)**

Study of an area of computer science not otherwise included in the curriculum. Topics are determined by the needs and interest of the students and faculty involved. May be repeated up to a total of six units. Offered on a Quad basis.

Prerequisite(s): CSC 254, MTH 131 and MTH 144 or MTH 164 and consent of instructor.

### **CSC 454 - Computer Architecture and Assembly Language**

**(4)**

This course covers the fundamentals of current pipelined computer designs. Experience with assembly language programming and digital logic and circuit design will be used to motivate the need for certain facets of the more general instruction set architecture. Throughout the course, performance issues, hardware constraints, and memory hierarchy will be shown to inform processor design. Additional topics include integer and floating point arithmetic, I/O and considerations surrounding multi-core architectures. Lecture three hours and laboratory two hours each week. Alternating Years. Offered 2018-19.

Prerequisite(s): CSC 154.

### **CSC 481 - Senior Seminar in Computer Science**

**(1)**

This one-unit capstone course is a seminar in which faculty members, some guests, and the students give lectures on topics of general interest in computer science. Graded Credit/No Credit.

Prerequisite(s): One of CSC 495 , CSC 498 , ISS 495 , ISS 498 , MTH 495 , MTH 498 , HON 498 or ISS 472 and Senior standing (or Junior standing if a December graduate).

### **CSC 491 - Independent Studies in Computer Science**

**(1-4)**

Study of a selected problem or topic under the direction of an instructor. The instructor and student propose the course of study. Approval by the department chair is required. May be repeated for a total of six units.

Prerequisite(s): Consent of instructor.

### **CSC 493 - Software Project**

**(3)**

This course presents the student with a strong experience in software engineering. Students, working in teams, investigate, design, implement and present to their classmates a significant software project. The project should solve a significant, complex and generalizable problem, dealing with constraints and trade-offs in the solution. The course

includes study of project management concerns such as planning, scheduling, and assessing progress. Alternating Years. Offered 2018-19.

Prerequisite(s): CSC 323 and Junior or Senior standing.

### **CSC 495 - Service Learning in Computer Science**

**(3)**

Students working in teams design and implement a project using a broad spectrum of computer science knowledge to meet the needs of a community organization or the university.

Prerequisite(s): Consent of instructor and Junior standing.

### **CSC 498 - Independent Research in Computer Science I**

**(2)**

Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, consent of instructor, and Junior standing.

### **CSC 499 - Independent Research in Computer Science II**

**(1)**

The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, CSC 498, and consent of instructor.

## **Economics**

### **ECO 100 - Survey of Economics (GE)**

**(3)**

A survey of economics including both macroeconomics and microeconomics for non-majors. A general understanding of economic systems, markets, exchange, consumer and producer behavior, resource efficiency, the role of government, money and banking, economic stabilization, economic opportunity, income inequality and the global economy, with primary focus on economic problems and applications to global, national and personal issues.

Prerequisite(s): MTH 099 or equivalent.

### **ECO 101 - Principles of Macroeconomics (GE)**

**(3)**

This course provides an understanding of fundamental principles governing production, distribution, and exchange of

wealth with emphasis on current economic problems, for business majors. Topics include national income determination, fiscal policy, monetary policy, economic stabilization policy, international linkages, balance of payment issues, exchange rate determination and international trade.

Prerequisite(s): MTH 099 or equivalent.

### **ECO 102 - Principles of Microeconomics (GE)**

**(3)**

This course provides fundamental principles governing production, distribution, and exchange of wealth with emphasis on current economic problems, for business majors. Topics include consumer choice theory, decision-making of firms based on costs and revenues, income determination and distribution, market structures, market failures, the economic role of government, and globalization.

Prerequisite(s): MTH 099 or equivalent.

### **ECO 310 - Intermediate Microeconomics**

**(3)**

This course will prepare the student in fundamental conceptual foundations of microeconomics at the intermediate level, including consumer theory, producer theory, market equilibrium, the structure of markets, general equilibrium, and exchange. A primary focus will be on analytical thinking skills, economic problem-solving, and real world applications.

Prerequisite(s): ECO 102 and MTH 173 or equivalent.

### **ECO 315 - Theories of Economic Development**

**(3)**

A globally focused course exploring economic development in-depth and considering how the poorest half of the world's population lives. Topics include population growth, healthcare and education services, political organizations, agricultural challenges, business, finance, and core economic theories from historic and modern eras. The topics are considered at different levels, including the family, community, national, regional, and global levels. Considerations of poverty and poverty alleviation approaches are investigated for effectiveness and potential application.

Prerequisite(s): ECO 101 and ECO 102 or consent of instructor.

### **ECO 330 - Intermediate Macroeconomics**

**(3)**

This course will prepare students to gain an understanding of the diverse macroeconomic models at the intermediate level, including the variables that determine national output, income, employment, money, inflation, interest rates, exchange rates capital flows, and international trade. Additional topics include the theory of economic growth, macroeconomic equilibrium analysis, modern macroeconomic models, economic fluctuations, and monetary and fiscal policies in closed and open economies.

Prerequisite(s): ECO 101 and MTH 173 .

### **ECO 380 - Money and Banking**

**(3)**

This course provides an understanding of the financial system, monetary policy, financial institutions, central banks and financial stability. Topics include an analysis of banking and monetary theory, the function and impact of money, credit, and banking on the economic system, government fiscal policies, and how interest rates are determined.

Prerequisite(s): ECO 101.

### **ECO 410 - International Economics**

**(3)**

This course presents theories and models of international trade and money, and government policy and macroeconomic stabilization, with a focus on global economic issues and applied economic topics. The economics of global cities, urban problems, poverty, labor, immigration, utilization of resources, environmental stewardship, globalization, gender, crime, and violence will be discussed.

Prerequisite(s): ECO 101 and ECO 102.  
Also offered as POL 437.

### **ECO 440 - The Economics of Race, Class and Gender (WS)**

**(3)**

A study of economic issues pertaining to race, class and gender, including economic status, poverty and inequality. Factors influencing economic status and opportunity, such as culture, family composition, education, work, labor market discrimination, economic value, and macroeconomic variables are considered. Alternative perspectives on causes of poverty and inequality are examined, and feminist economic thought is discussed.

Prerequisite(s): ECO 100 or ECO 101 or ECO 102 or consent of instructor.

### **ECO 450 - History of Economic Thought**

**(3)**

A study of the history of the development of major concepts of economic analysis and theory. Emphasis is placed on the role of the economic, political, social, and religious environments in the development of economic thinking and analysis. Consideration is given to the major economic theorists and how biblical concepts influence their thinking.

Prerequisite(s): ECO 101 and ECO 102.

### **ECO 460 - Applied Econometrics**

**(3)**

This course applies regression analysis to understand the relationships between economic variables and the causal factors. Students learn about estimation techniques and how to apply their results to make inferences that test economic behavioral hypotheses and form the foundation for economic policy. Topics include data problems such as multicollinearity, heteroskedasticity, autocorrelation and missing values.

Prerequisite(s): ECO 101, ECO 102, MTH 203, and MTH 173 .

### **ECO 490 - Special Studies in Economics**

**(3)**

Study in a special topic to be determined by the school. Open to Juniors and Seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **ECO 491 - Independent Studies in Economics**

**(3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Education**

### **EDU 302 - Foundations of Education and Learning Theory**

**(3)**

This survey course provides an overview of the major laws and principles regarding the historical and contemporary purposes, roles and functions of education in American society as well as an overview of the major concepts, theories and research related to the cognitive, linguistic, social, emotional and physical development of children and adolescents. Wesleyan perspectives in education are introduced. Effective instructional strategies that ensure active and equitable participation of all learners, as well as modifications for diverse learners with exceptionalities, are observed through fieldwork experiences. Twenty fieldwork hours are required. Candidates are responsible for transportation to and from the school site. Task-stream registration is required.

Offered as EDU 600.

### **EDU 306 - Principles of Language Acquisition**

**(3)**

This course focuses on the principles of language acquisition and effective instructional practices for English learners. It further examines the pedagogy of educational equity to provide English learners access to the core curriculum. Foundational knowledge and classroom instructional practices are linked through the systematic study of phonemic awareness, oral language, and literacy development. Special emphasis is placed on the Structured English Immersion model as practiced in California schools. Effective instructional strategies that ensure active and equitable participation of learners who are culturally, ethnically, and socioeconomically diverse are introduced and applied through fieldwork experiences. It is through this course that each candidate completes the CalTPA task "Subject Specific Pedagogy" as a performance-based measure of the knowledge and skills taught in this course. This course requires 20 clock hours of

observation and participation specific to culturally and linguistically diverse learners in a culturally diverse and inclusive school setting. Candidates are responsible for transportation to and from the school site. Task-stream registration required.

Prerequisite(s): EDU 302 - Foundations of Education and Learning Theory EDU 404 - Foundations of Special Education

Corequisite(s): EDU 400A

Offered as EDU 601

### **EDU 324 - Differentiated Mathematics Instruction for All Learners**

**(3)**

This methodology course addresses the planning of content-specific instruction and delivery of content consistent with state adopted (K-8) mathematics standards and the language needs of all learners. The interrelated components of a balanced program of mathematics and the fostering of positive attitudes toward mathematics are stressed. This course includes instruction in how to model concepts and teach learners to solve problems using multiple strategies and to anticipate, recognize and clarify mathematical misunderstandings that are common among K-8 learners. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied through fieldwork experience. Technology for teaching and learning is integrated in the course. It is through this course that each candidate completes the CalTPA task "Designing Instruction" as a performance-based measure of the knowledge and skills taught in this course. This course requires 20 clock hours of observation and participation specific to math instruction in a culturally diverse and inclusive school setting. Candidates are responsible for transportation to and from the school site. Task-stream registration required.

Prerequisite(s): MTH 223 - Fundamentals of Elementary Mathematics II, EDU 302 - Foundations of Education and Learning Theory, EDU 306 - Principles of Language Acquisition and EDU 404 - Foundations of Special Education

Offered as EDU 612

### **EDU 400A - Orientation to Assessment**

**(0)**

Throughout the preliminary teaching credential program, candidates participate in the performance based assessment system "CalTPA." The four assessments are submitted in various courses throughout the program. This course introduces candidates to the concepts and procedures for submission. The TPA assessment fee is attached to this course. This course is required for all Cross-Disciplinary Studies majors. Candidates from other majors are exempt from this course.

Offered as EDU 600A

### **EDU 404 - Foundations of Special Education**

**(3)**

This survey course provides an overview of the major educational practices, theories, and research regarding diverse learners with disabilities. Emergent issues and best practices, including differentiated instruction, curricular adaptations and modifications, compliance with laws, ethical concerns, and characteristics and needs of learners with disabilities, will be examined. Principles of effective collaborative and interdisciplinary teaming, positive behavior supports, and inclusive educational programming are addressed. This course meets the special education mainstreaming requirement for all basic teaching credentials. Twenty fieldwork hours are required when taken on the undergraduate

campus. Task-stream registration required.

Pre or Corequisite: EDU 302

Offered as EDU 602.

### **EDU 417 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education**

(2)

This course offers candidates the opportunity to develop knowledge, skills and dispositions related to contemporary issues and challenges in California's teaching/learning systems. Special attention will be given to those issues that impede or aid positive school, classroom and community cultures and students' general academic and social success. Utilizing an interdisciplinary focus grounded in Educational Learning/Teaching Theory and pedagogy, candidates explore personal and professional planning practices of self-assessment, missional or life purpose development. Letter

Prerequisite(s): EDU 302 and EDU 404 or Consent of Instructor

### **EDU 432 - Methods of Teaching Secondary Language Arts**

(3)

This methodology course is designed to prepare prospective secondary-level (Grades 7- 12) candidates for successful teaching of language arts. Candidates become familiar with a variety of specific methods to use in teaching literature, composition, and language. The topics explored include the following: trends in English curriculum development, the six-trait writing process, assessment, classroom application of various forms of technology, and professional organizations. Instruction is aligned to the state adopted English Language Arts Content Standards (7-12) and the English Language Development Standards. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (Equivalent to Literature 535 Methods of Teaching English (3).)

### **EDU 433 - Methods for Teaching Secondary Mathematics**

(3)

This methodology course is designed to prepare prospective secondary-level (Grades 7- 12) candidates for successful teaching of mathematics content. Topics include: strategies and models for developing mathematical concepts, building skills for understanding and communicating mathematical ideas effectively, and techniques for teaching critical thinking and problem solving. Attention is also given to the following: methods of presentation, awareness of national mathematics organizations, the writing of unit/daily lesson plans, microteaching of a math lesson, selection of materials, inclusionary practices, classroom application of various forms of technology, and techniques for assessment. Instruction is aligned to the state-adopted Mathematics Content Standards (7-12) and the English Language Development Standards. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (Equivalent to Mathematics 463 Secondary School Mathematics, (3). PLNU students who complete Mathematics 463 are exempt from taking EDU 433 or 623 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

### **EDU 434 - Methods of Teaching Secondary Science**

**(3)**

This methodology course is designed to prepare prospective secondary-level (Grades 7- 12) candidates for successful teaching of life and physical sciences. Topics include the following: pedagogical content knowledge, curriculum selection and design, safe laboratory management and operation, integration of language arts and mathematics in the science curriculum, methods and modalities of science teaching, assessment, classroom application of various forms of technology, and professional organizations. Micro-teaching, classroom observation and group and self-evaluation are included. Instruction is aligned to the state-adopted Science Content Standards (7-12) and the English Language Development Standards. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically, and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU students who complete this course are exempt from taking EDU 434 or 624 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

#### **EDU 435 - Methods of Teaching Secondary Social Science**

**(3)**

This methodology course is designed to prepare prospective secondary-level (Grades 7- 12) candidates for successful teaching of both the social and behavioral sciences. Topics include the following: instructional planning, evaluation and questioning techniques, research methods, and professional organizations. Instruction is aligned to the state-adopted Social Science Content Standards (7-12) and the English Language Development Standards. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU students who complete this course are exempt from taking EDU 623 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

#### **EDU 436 - Methods for Teaching Secondary Foreign Language**

**(3)**

This methods course is based on the organizing principles of the California State Framework, the National Standards for the Learning of Foreign Languages in the 21st Century, the American Council on the Teaching of Foreign Guidelines, and current research in methodology in foreign language instruction. Topics include the following: instructional planning, selection and classroom application of various forms of technology, evaluation and questioning techniques, research methods, and professional organizations. Each candidate will develop a unit of instruction suitable for a secondary level classroom. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU students who complete this course are exempt from taking EDU 626 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

#### **EDU 437 - Methods for Teaching Secondary Visual Arts**

**(3)**

This methods course introduces the study to the theory and practice of teaching visual arts in secondary schools. Content is designed to address content areas of the California Visual Arts Standards in middle and high schools. Topics include the following: instructional planning and classroom management, selection and classroom application of various forms of technology, evaluation and questioning techniques, state and national content standards and

assessments, research methods, professional organizations (National Association of Art Educators), and the inclusive classroom. Each candidate develops a unit of instruction suitable for a secondary level classroom. Each candidate is required to prepare a final portfolio of the work in the course. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (Equivalent to Art 455 Visual Arts in the Classroom II, (3). PLNU candidates who complete this course or Art 455 are exempt from taking EDU 627 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

### **EDU 438 - Methods for Teaching Secondary Physical Education**

**(3)**

This methods course introduces the philosophical bases, instructional techniques and procedures, and the various elements involved in teaching physical education at the secondary level. Topics include the following: classroom teaching methods, practical application, and the California State Framework in Physical Education. Each candidate is required to prepare a final portfolio of the work in the course. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU candidates who complete this course are exempt from taking EDU 628 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree).

### **EDU 439 - Content-Specific Pedagogy for Secondary Teachers**

**(3)**

This methodology course introduces candidates to a variety of assessments, instructional, and management strategies as related to secondary content subject matter. Candidates explore the delivery of instruction in the content areas in which they seek their credential with extensive research, practice, and reflection. Topics include the following: lesson planning and formative assessment. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (Equivalent to Music Education 454 Secondary School Music Methods, (3). PLNU candidates who complete this course or Music Education 454 are exempt from taking EDU 629 for their preliminary single subject credential program but need to replace it with three hours of a graduate level elective for the MAT degree.)

### **EDU 490 - Special Studies in Education**

**(1-3)**

Intensive study in a special topic in education under the direction of faculty member. May be repeated for a total of six units.

Prerequisite(s): Consent of instructor.

### **EDU 499 - Research in Education**

**(1-3)**

Open to candidates of proven ability. May be repeated for a total of six units.

Prerequisite(s): Consent of the dean of the School of Education and of instructor.

## **Engineering**

### **EGR 110 - Computational Methods for Engineers and Scientists I**

**(1)**

An introduction to techniques used in scientific analysis, including graphing of data, curve fitting, numerical methods of problem solution, error analysis, and the use of computers for solving problems in physics and engineering. Three hours laboratory each week. Offered on a Quad basis.

### **EGR 120 - Computational Methods for Engineers & Scientists II**

**(1)**

Engineering and scientific computing utilizing MatLab software. Examples and applications taken from the fields of engineering, physics, chemistry, and biology. Three hours laboratory each week. Offered on a Quad basis.

Corequisite(s): EGR 110.

### **EGR 215 - Engineering Mechanics**

**(3)**

Statics of particles and rigid bodies as applied to engineering design. Topics include vector algebra, forces, moments and couples, conditions of equilibrium, friction, and virtual work.

Prerequisite(s): PHY 241.

### **EGR 225 - Electronics Circuits Analysis**

**(3)**

Theory and analysis of electrical and electronics circuits. Topics include basic circuit elements, laws of circuit analysis, Kirchoff's laws, loop and nodal analysis, differential equations for modeling electronic circuits, AC and DC analysis, transient analysis, complex impedance and steady state analysis, Laplace Transforms, and frequency domain analysis.

Prerequisite(s): PHY 242

### **EGR 265 - Mechanics of Materials**

**(3)**

Theory and analysis of forces, stress, and strain within engineering structural elements and members. Topics include the theory of stress and strain, elastic and plastic deformation, modes of structural failure, compression and tension, torsion, shear, shafts, beams, posts, transformations of stress and strain.

Prerequisite(s): PHY 241

### **EGR 352 - Analog Electronics**

**(2)**

AC/DC circuit analysis, transients, characteristics of equivalent circuits for diodes, transistors, power supplies, transistor/operational amplifiers, and feedback applications. Two lectures and one laboratory each week.

Prerequisite(s): PHY 142 or PHY 242.

### **EGR 422 - Digital Electronics**

**(2)**

Boolean algebra, logic gates, combinational logic circuits, state minimization, flip/flops, sequential circuits, asynchronous and synchronous counters. Course emphasizes design aspects using electronic design software. Two lectures and one laboratory each week.

Prerequisite(s): PHY 142 or PHY 242.

### **EGR 432 - Computer Interfacing**

**(2)**

Design, analysis, and implementation of digital controls systems using microcomputers and microcontrollers. Special attention given to the interfacing of hardware and digital devices to processors and controllers. Two lectures and one laboratory each week.

Prerequisite(s): EGR 422.

### **EGR 442 - Mobile Robotics**

**(2)**

The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on mobile robots and the importance of sensors and the integration of those sensors. Also to be discussed are navigation mechanisms and the various robot learning and control paradigms. Two lectures and one laboratory each week.

Prerequisite(s): EGR 432.

### **EGR 489 - Internship in Engineering**

**(1-4)**

Designed to provide engineering experience in applied settings. an academic plan must be developed in consultation between the supervising faculty member, student and work supervisor. Students must complete 45 hours of supervised work for each unit of credit received. May be repeated up to a total of four units.

### **EGR 490 - Special Topics in Engineering**

**(1-4)**

The topics chosen in engineering depend on regular or visiting faculty expertise as well as student demand. May be repeated (with varied topics) up to a total of six units.

## **Environmental Science**

### **EVS 396 - Advanced Biology**

**(3)**

Field-intensive course that explores the field biology of various organisms and ecosystems in order to understand fundamental principles of life. Applies to off-campus field immersion programs such as Au Sable, Quetzal Educational Research Center, Creation Care Study Program, and School for Field Studies.

### **EVS 397 - Advanced Ecology**

**(3)**

Field-intensive course that examines the interrelationships between organisms and their biotic and physical environments. Applies to off-campus field immersion programs such as Au Sable, Quetzal Educational Research Center, Creation Care Study Program, and School for Field Studies.

### **EVS 398 - Advanced Ecological Applications**

**(3)**

Field-intensive course that applies technological and/or computational tools to increase scientific understanding, monitor environments, restore damaged ecosystems, and/or solve human and environmental problems. Applies to off-campus field immersion programs such as Au Sable, Quetzal Educational Research Center, Creation Care Study Program, and School for Field Studies.

### **EVS 399 - Public Policy and Stewardship**

**(3)**

Course that explores public policy, conservation practice, and/or sustainable development under various real-world contexts to manage and/or restore ecosystems and improve human well-being. Applies to off-campus field immersion programs such as Au Sable, Quetzal Educational Research Center, Creation Care Study Program, and School for Field Studies.

## **Exercise and Sport Science**

### **EXS 201 - Fundamentals of Fitness Assessment and Development**

**(2)**

Fundamental knowledge needed to assess and implement health and fitness programs. Students will assess and develop the five health-related components of physical fitness: body composition, muscular strength, muscular endurance, flexibility and cardiorespiratory fitness.

### **EXS 330 - Nutrition for Exercise and Sport Performance**

**(3)**

This course provides essential knowledge in the roles of nutrients to improve and sustain optimal performance in sport and exercise. Specific emphasis will be placed on understanding the functions of macro and micronutrients in the body which fuel energy systems, prevent injury, enhance recovery and optimize health. Current research and practices will be incorporated that use nutritional intervention to improve performance.

Prerequisite(s): PED 200 or consent of instructor.

### **EXS 350 - Fitness Assessment and Exercise Prescription**

**(3)**

In-depth study of the principles and techniques used to assess health and physical fitness and to design and prescribe exercise programs and physical activities. Students will acquire the knowledge and skills necessary to address the fitness needs of apparently healthy populations, those with medical considerations, and athletic populations. Special fee.

Prerequisite(s): KIN 340 and KIN 340L.

Corequisite(s): EXS 350L.

### **EXS 350L - Fitness Assessment and Exercise Prescription Lab**

**(1)**

Practical laboratory experiences in fitness assessment and exercise prescription. Special fee.

Corequisite(s): EXS 350.

### **EXS 370 - Praxis of Strength Training and Conditioning**

**(3)**

This course provides an in-depth study of the principles and techniques used to assess health and physical fitness and to design and prescribe exercise programs and physical activities. Students will acquire the knowledge and skills necessary to sit for the NSCA's certification exam or another fitness related certification exam (e.g. ACSM, ACE, NASM).

Prerequisite(s): KIN 340.

### **EXS 480 - Leadership in the Fitness Professions**

**(3)**

This course surveys general organizational leadership principles and their application to the organization and administration of the health/fitness, coaching and physical education professions. Emphasis is on business management principles and operational concepts, including organizational structure, facility management, industry standards and guidelines, and personnel management practices.

## **Family and Consumer Sciences**

### **FCS 101 - Introduction to Family and Consumer Sciences**

(1)

An introduction to the integration of professional specializations within the Department of Family and Consumer Sciences. A wide array of options in each major and the career paths are presented. Discussion addresses how each specialization enhances the quality of life for individuals, families and communities. Offered every fall.

### **FCS 110 - Fundamentals of Food**

(2)

Development of technique and application of fundamental scientific principles of food preparation. Establishment of quality standards for food products and food safety. Lecture and food preparation laboratory. Offered every semester.

### **FCS 120 - Child and Adolescent Development**

(4)

The study of physical, social, emotional, cognitive growth and development of the child, from prenatal months through adolescent years. Classroom lecture and course readings are supplemented by laboratory field experience in the Early Childhood Learning Center or other centers designed for children and adolescents, and appropriate projects. Offered every spring. Must not be taken concurrent to FCS 150.

### **FCS 150 - Human Development**

(3)

A study of the physical, social, emotional, and intellectual development of the individual throughout the lifespan. Observation and field experience required. Offered every semester. Must not be taken concurrent to FCS 120.

### **FCS 203 - Infant and Toddler Development**

(3)

The study of the process of prenatal, infant and toddler growth and development which will include: exploration of the impact of culture, atypical behavior and development, socialization techniques, interpersonal relationships of infant-toddler and caregivers, suitable environments for health and safety, and legal requirements for infant-toddler care. Classroom lecture and course readings are supplemented by required observation and field experience. Offered alternate years.

Prerequisite(s): FCS 120 or FCS 150

### **FCS 225 - Fundamentals of Nutrition**

(3)

A study of the principles of nutrition science and their evidence-based application of nutrition to health/homeostasis, disease prevention and disease treatment. Offered every semester.

Prerequisite(s): CHE 103, CHE 152 or equivalent.

**FCS 230 - Personal and Consumer Financial Management**

(2)

Relationship of values, standards and goals to the allocation of resources and the personal and consumer decision-making process. Emphasis is placed on the standards for selection of consumer goods, protection of the consumer, and conditions which influence individual and family management. Offered every semester.

**FCS 250 - Introduction to Family and Consumer Sciences Research**

(1)

Introduction to the research process, including methodologies and statistics, in the execution and evaluation of family and consumer sciences research. Scientific literature is reviewed, including articles in peer-review professional journals. Not Repeatable. Offered once a year. Letter Grading

**FCS 300 - Food Economics and Management**

(2)

A study and application of food management skills, including food selection, food preparation techniques and budgetary control, in meal planning and meal service. Lecture, food preparation laboratory, and computer applications. Offered every fall.

Prerequisite(s): FCS 110 and consent of instructor.

**FCS 303 - Cultural Foods**

(2)

The influence of world cultures and ethnic food habits on food patterns. Lecture, computer applications and food preparation laboratory. Offered every spring.

Prerequisite(s): FCS 110 and consent of instructor.

**FCS 305 - Life Cycle Nutrition**

(4)

A study of nutrition specifically applied to the stages of human development and to the current nutritional issues with analysis of personal nutritional needs. Offered every fall.

**FCS 310 - Early Childhood Education**

(4)

The study of early childhood education theories and philosophies. Practice of principles, curriculum, methods, material and special needs of preschool and children in first through third grade are discussed. Students gain experience in appropriate lesson plan writing with developmentally appropriate practices. A supervised field experience is required.

Offered every fall.

Prerequisite(s): FCS 120.

### **FCS 313 - Adolescent Development in the Family Context**

**(2)**

Developmental changes and challenges of adolescents and their families as they deal with current societal issues, autonomy, peer relationships, sexuality, parent-adolescent communication, values, teen pregnancy, substance abuse, and adolescents as parents. These major issues affecting adolescents and their families are examined using data from a variety of theoretical, empirical, and clinical viewpoints. Fieldwork is required. Offered alternate years.

Prerequisite(s): FCS 120 or FCS 150.

### **FCS 315 - Personal, Family, and Community Health (GE)**

**(3)**

An introductory course designed to provide students with a broad spectrum of applicable information intended to promote a healthy lifestyle. A holistic approach is used that encompasses the physical, mental, emotional, relational, spiritual, and environmental aspects of wellness. Not repeatable. Offered every semester.

Prerequisite(s): Junior standing.

### **FCS 330 - Community Nutrition**

**(3)**

A study of the delivery of nutrition services in the community setting, with an emphasis on disease prevention and health promotion in vulnerable populations. Topics discussed include nutrition epidemiology, food policy, cultural competence in nutrition education, food insecurity, and socioeconomic factors affecting food consumption, nutrition status and health. Lecture, computer applications, laboratory and field experiences. Offered alternate years.

Prerequisite(s): FCS 225.

Corequisite(s): FCS 331 (required).

### **FCS 331 - Community Nutrition Practicum**

**(1)**

Application of principles of community nutrition programming, including field experience and observation of nutrition services provided by community-based organizations and governmental entities. Offered alternate years.

Prerequisite(s): FCS 225.

Concurrent: Must enroll concurrently FCS 330.

Corequisite(s): FCS 330 (required).

### **FCS 335 - Nutrition Research Through the Life Cycle**

**(2)**

A study of nutrition specifically applied to the stages of human development and the life cycle. Current scientific literature is reviewed and applicable research methodologies are discussed. The role of statistics in scientific research is reviewed. Computer applications and laboratory. Offered alternate years.

Prerequisite(s): FCS 225 and FCS 250

### **FCS 340 - Nutrition in Women's Wellbeing (WS)**

(2)

A survey of current evidence-based nutrition principles and guidelines corresponding to gender differences in health. Topics include dietary prevention of cardiovascular disease, diabetes, cancers, and osteoporosis in women as well as special needs in pregnancy/lactation, menopause and weight management. Computer applications. Offered every spring.

### **FCS 355 - Development of Special Needs Children**

(3)

The study of strategies of guiding children with special needs. the role of the adults influencing the child's social, emotional, cognitive and physical growth and development are investigated. Family systems theories and educational methods, environments and programs are explored as it relates to the special needs child's developmental stages. A wide variety of children's exceptionalities are included giftedness, physical challenges, learning disabilities, and behavior disorders. Observation, field experiences, and visitations to community educational facilities are required. Fifteen hours for field experience. Offered every spring.

Prerequisite(s): FCS 120 or FCS 150, or consent of instructor.

### **FCS 365 - Advanced Nutrition**

(3)

Theories integrated from physiology, biochemistry and nutrition. an in-depth study of nutrients and their role in human metabolism. Current research on human metabolic processes is analyzed. Laboratory applications. Offered every year.

Prerequisite(s): FCS 225, BIO 130, and CHE 294.

### **FCS 385 - Family and Parenting**

(2)

An analysis of family interaction patterns throughout the life cycle. Emphasis is on understanding family dynamics in relationships as well as opportunities to clarify values and improve communication patterns within the family. Exploration and discussion of the roles of parents in a child's development, concerns facing parents and parenting in varying life circumstances. Offered every semester.

### **FCS 414 - Practices in Nutrition Education and Dietary Counseling**

(2)

Practical experience in techniques that will enhance patient/client communication for nutrition education. Discussion and application of counseling methods, adult learning, motivation theory, lesson planning, group communication

techniques, medical charting techniques and the general nutrition care process. Offered alternate years.

Prerequisite(s): FCS 225.

### **FCS 415 - Medical Nutrition Therapy**

**(3)**

A study of nutrition status and assessments; nutrition care strategies; and the modification of normal food intake with emphasis on dietary adjustments necessitated by certain disease and disorder processes and conditions focusing on the hospitalized and/or ambulatory patient. Offered alternate years.

Prerequisite(s): FCS 365 and BIO 140.

Corequisite(s): FCS 417 (Required).

### **FCS 417 - Medical Nutrition Therapy Practicum**

**(1)**

Case studies, medical chart notation practice, opportunity to interact with dietetic professionals working in clinical fields. Offered alternate years.

Prerequisite(s): FCS 365 and BIO 140.

Concurrent: Must enroll concurrently in FCS 415.

Corequisite(s): FCS 415 (Required).

### **FCS 420 - Child Development in the Family and Community**

**(4)**

A study of the development of the child as influenced by the family, school, and community. Emphasis is placed on analyzing the social influences on family systems, child care, schools, poverty, peer groups, mass media, diverse cultures and community services on children's development. Field experience required. Offered every fall.

Prerequisite(s): FCS 120 or FCS 150. Junior or Senior standing only.

### **FCS 425 - Child and Adolescent Nutrition**

**(3)**

A study of the effect of nutrition on the development of the child, pre-natal through adolescent. Attention is given to nutrition related health problems and dietary planning. Computer applications required. Offered every spring

Prerequisite(s): FCS 225 or FCS 305.

### **FCS 435 - Food Service Production and Management**

**(3)**

Principles of successful organization and management with their application to the effective operation of food services. Administrative responsibilities of a food manager. Planning and preparing food to meet specific product standards for large groups. Lecture, computer applications, additional two hours per week spent in a food service organization,

laboratory setting, and field experiences required. Offered alternate years.

Prerequisite(s): FCS 110.

### **FCS 445 - Catering**

**(2)**

A study of specialized food production techniques and operation principles for home-based or small catering services. Recipe and menu development, cost marketing and implementing a catering operation will be discussed. Lecture, laboratory experience, field experiences, and computer applications required. Offered alternate years.

Prerequisite(s): FCS 110.

### **FCS 455 - Food Science**

**(3)**

Analysis of the composition and chemical structure of food that affect the color, flavor, texture, aroma, and nutritive quality. the application of this information for careers in the food industry. Current research in food technology and food consumption patterns is investigated. Computer applications and laboratory required. Offered alternate years.

Prerequisite(s): FCS 110 and Chemistry 294.

### **FCS 460 - Administration and Supervision in Early Childhood Education**

**(4)**

Application of basic principles in the guidance of young children. to examine the multidimensional roles of the early childhood program director/administrative styles, management tools and interpersonal skills that contribute to effective leadership. Supervised field experience in an early childhood education setting is required. Offered every spring.

Prerequisite(s): FCS 310.

### **FCS 470 - Practicum in Child Development**

**(3)**

Supervised practicum in laboratory experience in an approved early childhood center. It is designed for students who plan careers in early childhood and family support programs. Students become familiar with observing the development, guiding, and teaching children in a preschool program. This course may be used toward the experience component of the State of California Child Development Site Supervisor Permit. Offered every fall.

Prerequisite(s): FCS 120 and FCS 310 and consent of instructor.

### **FCS 475 - Internship in Child Development**

**(2 or 4)**

Career-related work experience in which students observe and actively participate using their acquired skills and knowledge. Students are under the supervision of a department faculty supervisor and a qualified on-site supervisor. For 2 units of credit, 80 hours of work experience is required; for four units, 160 hours of work experience is required.

May be repeated up to a total of four units. Offered every semester. Graded Credit/No Credit.

Prerequisite(s): Senior standing in the Department of Family and Consumer Sciences. FCS 120. Consent of department chair.

### **FCS 480 - Internship in Family and Consumer Sciences**

**(2 or 4)**

Career-related work experience in which students observe and actively participate using their acquired skills and knowledge. Students are under the supervision of a department faculty supervisor and a qualified on-site supervisor. For 2 units of credit, 80 hours of work experience is required; for four units, 160 hours of work experience is required. May be repeated up to a total of four units. Offered every semester. Graded Credit/ No Credit.

Prerequisite(s): Senior standing in the Department of Family and Consumer Sciences. Consent of department chair.

### **FCS 490 - Special Studies in Family and Consumer Sciences**

**(1-4)**

An individualized and detailed research study from selected topics. the research topic must be approved and supervised throughout the semester. May be repeated up to a total of four units. Offered every semester.

Prerequisite(s): Senior standing in the Department of Family and Consumer Sciences. Consent of department chair.

### **FCS 497 - Family and Consumer Sciences Senior Seminar**

**(2)**

Analysis and discussions of interrelated issues found within the areas of Family and Consumer Sciences. Topics studied are research, public policy, professionalism, leadership, and historical significance. Required of all seniors graduating in the Department of Family and Consumer Sciences. Offered every semester.

Prerequisite(s): FCS 101 and senior standing in the Department of Family and Consumer Sciences.

## **Finance**

### **FIN 335 - Business Finance**

**(3)**

This course provides an introduction to the principles that guide the financial management of a business enterprise, with an emphasis on decision-making and value creation. Topics include financial analysis, time value of money, risk and return, security valuation, capital budgeting, cost of capital, forecasting and dividend policy.

Prerequisite(s): ECO 102, MTH 153 or MTH 173 , MTH 203 and ACC 202 or consent of instructor for non-majors.

### **FIN 385 - Intermediate Finance**

**(3)**

This course provides a study of the major decision-making areas of financial management at an intermediate level, including cost of capital, capital budgeting, dividend policy and forecasting. Advanced topics include business valuation, mergers and acquisitions, bankruptcy and reorganization, securities offerings and finance for emerging businesses. Case studies will be used to apply concepts to business situations.

Prerequisite(s): FIN 335

#### **FIN 415 - Investments**

**(3)**

A study of the principles and techniques of security and investment analysis. Topics include securities markets, risk and return, modern portfolio theory, investing in common stocks and fixed-income securities, portfolio management and derivative securities, including options and futures.

Prerequisite(s): FIN 335

#### **FIN 425 - Financial Statement Analysis and Valuation**

**(3)**

An applications-oriented course designed to develop the tools essential to evaluate the performance and assess the value of companies from a decision maker's perspective. Topics include industry and competitive strategy analysis, accounting analysis, ratio analysis, forecasting, earnings and cash based valuation models, and equity and credit analysis.

Prerequisite(s): FIN 335

Senior Standing Only.

Also offered as ACC 425.

#### **FIN 435 - International Finance**

**(3)**

A study of the principles and practices at the core of multinational finance, including the financial issues faced by corporations operating in an international environment. Topics include the global financial environment, foreign exchange markets and instruments, financing global firms, multinational capital budgeting and international portfolio diversification.

Prerequisite(s): FIN 335

#### **FIN 490 - Special Topics in Finance**

**(3)**

Study in a special topic to be determined by the school. Open to Juniors and Seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **FIN 491 - Independent Studies in Finance**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **French**

### **FRE 101 - Elementary French I (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom. Offered fall.

### **FRE 102 - Elementary French II (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom. Offered spring.

Prerequisite(s): FRE 101

### **FRE 250 - Intermediate French I**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Conducted in French.

Prerequisite(s): FRE 102 or consent of instructor.

### **FRE 251 - Intermediate French II**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Conducted in French.

Prerequisite(s): FRE 250 or consent of instructor.

### **FRE 303 - French Conversation**

**(3)**

A class concentrating in gaining oral proficiency around a series of different themes and acquiring command of the modern idiom as spoken in France.

Prerequisite(s): French 251 or consent of instructor.

**FRE 315 - French Culture and Civilization**

**(3)**

A study of French civilization including a consideration of the present structure of French society and politics and a brief view of the achievements of France from the middle ages to the present.

Prerequisite(s): FRE 251 or consent of instructor.

**FRE 320 - Survey of French Literature**

**(3)**

Selections of important literature from the middle ages to the modern day are read and discussed in French.

Prerequisite(s): FRE 251 or consent of instructor.

**FRE 325 - Francophone Literature**

**(3)**

A study of Francophone texts from Quebec, the Caribbean, the Maghreb, Central Africa, Lebanon and Vietnam. This class addresses issues of national identity, post-colonialism and recent trends toward globalization.

Prerequisite(s): FRE 251 - Intermediate French II

**FRE 420 - Studies in French Literature**

**(3)**

A study of a particular period, a particular genre, or a particular author of French literature. This class also addresses some theoretical perspectives on textual hermeneutics. Offered every other year.

Prerequisite(s): FRE 320 - Survey of French Literature

**FRE 490 - Special Studies in French**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated for a total of up to six units.

Prerequisite(s): Consent of instructor and department chair.

**German**

**GER 101 - Elementary German I (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom. Offered fall and spring.

**GER 102 - Elementary German II (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom. Offered fall and spring.

**GER 250 - Intermediate German I**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Conducted in German.

Prerequisite(s): GER 102 or consent of instructor.

**GER 251 - Intermediate German II**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Conducted in German.

Prerequisite(s): GER 102 or consent of instructor.

**GER 490 - Special Studies in German**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated for a total of up to six units.

Prerequisite(s): Consent of instructor and department chair.

**History**

**HIS 110 - World Civilizations I (GE)**

(3)

A survey of world societies from the earliest Eurasian civilizations to the era of European expansion in the 16th century. Offered every fall and spring.

**HIS 111 - World Civilizations II (GE)**

(3)

A survey of world societies from the era of European voyages of discovery to the formation of a global civilization in the late 20th century. Offered every fall and spring.

**HIS 120 - United States History from Early America to the Twentieth Century**

(3)

This survey course explores the major themes in American history from the age of European exploration to the turn of the twentieth century. This course begins with the Indigenous Peoples of the Americas, the subsequent colonization by Europeans, and the rise of slavery. It traces the major political, economic, religious, and social developments through the colonial era, the American Revolution, the formation of the U.S. government, the Civil War, and Reconstruction. Throughout the whole course, there will be an emphasis on the role of Native Americans, Black Americans (both slave and free), immigrants, and women.

**HIS 270 - Research Methods**

(4)

An introduction to historical methods and the skills necessary for upper division work in history. While writing several short papers and one major research paper, students practice a wide range of research skills such as analyzing primary and secondary texts, working in archives and libraries, editing and revising, note taking, and documentation. In addition, class readings on contemporary historiography and new methods such as cultural studies and material culture acquaint students with the wide range of approaches to history. Students also visit local libraries, archives, and museums, and are encouraged to investigate the opportunities available for internships and career development during their student years.

**HIS 308 - Early Modern Europe**

(4)

Political, cultural, and intellectual development in continental Europe from 1648-1789. Emphasis is on the Scientific Revolution and Enlightenment, European expansion, and the social transformation of Europe leading to the French Revolution.

**HIS 311 - European Intellectual History**

(4)

An upper-division seminar on the intellectual history of Europe from the 1780s through the end of the 19th century. Readings analyze the rise of the national intellectual traditions in England and on the Continent, including Rousseau, Kant, Hegel, Schopenhauer, Mill, Nietzsche, Freud, and others. Emphasis on the rise of philosophical irrationalism within the context of post-Enlightenment thought.

Also offered as PHL 311.

**HIS 316 - Colonial and Revolutionary America**

(4)

North American history from initial Indian, Spanish, French, and British attempts to create working relationships to the fracturing of the French and Indian War, Revolutionary War, and War of 1812. The course emphasizes the diverse political experiments and struggles that characterize 17th and 18th-century North America, especially the intellectual roots and contemporary ideas manifested in the United States Constitution.

**HIS 320 - United States History, 1815-1914**

(4)

An analysis of the political leadership of Andrew Jackson and Abraham Lincoln; the ideas of liberalism, nationalism, expansion, and industrialization; the social impact of religious revivals, slavery, and feminism; and the cataclysmic impact of the Mexican, Civil, and Spanish-American wars as the nation hurtled toward world power status after World War I.

**HIS 340 - Russia to 1900**

(4)

A history of Russia from the establishment of Kievan Rus to the end of the 19th century, emphasizing the factors involved in the rise and development of the Russian Empire.

**HIS 342 - Twentieth-Century Russia and the Soviet Union**

(4)

Beginning with the Revolution of 1905, this course examines the cataclysmic changes which have taken place in the Russian Empire and the Soviet Union during the 20th century.

**HIS 350 - Islamic Civilization**

(4)

This course surveys the history of the Islamic world from the birth of Muhammad to 1800, with special focus on the religion of Islam and its impact on diverse Muslim societies.

**HIS 355 - Modern Middle East**

(4)

This course is a history of the Middle East since 1800, focusing on European imperialism, colonialism, nationalism, Arab-Israeli conflicts, and Islamic revival movements.

**HIS 356 - Early East Asia**

(4)

An introduction to the societies and cultures of pre-modern China, Japan, and Korea, three of the countries that make up the geographical and cultural unit of East Asia.

**HIS 360 - Modern South Asia**

(4)

The Indian subcontinent from the Early Modern period to the present, with emphasis on the interaction between South Asia and the wider world, especially the modern West.

**HIS 365 - Modern Japan and Korea**

(4)

This course explores the forces of continuity and change in the transformation of Japan and Korea since the mid-16th century; examines each country's role in the other's "modernization;" and explores the region's interaction with the West in the run-up to the "Pacific Century."

**HIS 368 - Modern China Through Film**

(4)

This is a lecture class on films reflecting critically on historical interpretations of modern China. Emphasis is on the analysis of social and political themes reflected in the historical periods, the explication of cultural aspects, and the discussion of the narrative structure that develops a human tragedy or comedy through modern Chinese history.

**HIS 369 - China in Revolution**

(4)

China in Revolution introduces the epic sweep of China's modern transformations examining the uneasy relationship between past and present through major revolutions. The themes of the course are the changing understandings of China's cultural and political pasts and the problems and paradoxes of Chinese modernity.

**HIS 370 - California History**

(4)

A comprehensive survey of California from prehistory through Spanish exploration, Mexican rule, and evolution as an American state since 1850. Emphasis is placed on comparing myth to reality, new directions in interpretation, and demonstrating how past social, economic, and political events have had an impact on the present.

**HIS 372 - Two Years Before the Mast and the History of Coastal California**

(2)

While sailing on the Californian, a replica of an 1847 Revenue Cutter that patrolled the coast of California, this course uses R.H. Dana's Two Years Before the Mast as the focal point for studying the multi-cultural history of the California coast before the 1850s. Summer only.

### **HIS 375 - African Cultures and Histories**

**(3)**

An interdisciplinary examination of the social and cultural histories of Africa with emphasis on the contact between Africans and Europeans since the late Nineteenth Century.

Also offered as SOC 375.

### **HIS 380 - America in the 1960's**

**(4)**

The study of this pivotal decade focuses on many social, economic, political, and military themes, including the Vietnam War, assassinations, Cold War, civil rights, the war against poverty, the space race, women's rights, urban riots, student unrest, music, and other cultural manifestations of alienation from the prevailing American culture.

### **HIS 390 - Off-Campus Cooperative Programs**

**(3-15)**

This course provides history credit for participation in an off-campus studies program approved by the department, such as historical and archaeological programs offered through other colleges and universities or those offered on a special basis by Point Loma. Application for approval is made to the departmental office.

### **HIS 413 - Nineteenth-Century Europe**

**(4)**

A survey of European society and politics from 1789 to 1914. Emphasis is placed on the French Revolution, the industrial revolution, national unification, and the European balance of power until 1914.

### **HIS 414 - Twentieth-Century Europe**

**(4)**

A survey of European history since World War I. Special attention is given to the rise of fascist regimes, the Cold War, and the opening of Eastern Europe since 1989.

### **HIS 415 - Europe and the World**

**(4)**

European imperialism since 1800 with an emphasis on the British Empire in India and the European scramble for Africa. Lectures and readings compare different national approaches to colonialism and Empire, assess the impact of Empire on the cultural and political developments of the European nations, and consider the legacy of colonialism in the 20th century.

### **HIS 425 - United States Since 1914**

**(4)**

Beginning with the outbreak of World War I, analyzes in detail the kaleidoscopic nature of contemporary American life. Emphasizes the shift from traditional values to modern relativism and secularism, the benefits and liabilities of being a world power, and the impact of great personalities as the nation threaded its way through depression, wars, scandals, and technological advance.

**HIS 435 - Asian-American History: 1800 to the Present**

(4)

This course introduces the field of Asian-American history, which examines the experiences of people of Chinese, Japanese, Korean, South Asian, Filipino, and Southeast Asian ancestry in the United States.

**HIS 436 - America in East Asia: 1800 to the Present**

(4)

This course is designed to acquaint students with the on-going interchange between the U.S. and East Asian countries. Although several units of the course are devoted to China, Japan, and Korea, attention is also given to such Southeast Asian countries as Vietnam and the Philippines. Among the themes explored in the course are tradition and modernization, collisions between East and West, democracy and authoritarianism, imperialism and nationalism, and interdependence and independence.

**HIS 460 - Internship in History**

(1-4)

A learning experience in a work environment at selected sites. Students are under the supervision of an on-site supervisor and a faculty academic advisor. Repeatable for up to 4 units.

Prerequisite(s): Consent of instructor.

**HIS 470 - Senior Seminar in History**

(4)

A capstone experience that brings together the knowledge and skills developed within the History major. Students will explore the various career paths available to History major graduates and will survey the theoretical and philosophical debates within the discipline of History. All History majors must take this course in the fall semester of their senior year. Not repeatable.

**HIS 475 - Topics in Women's History (WS)**

(4)

This seminar explores themes in the field of women's history. Women's roles and historical contributions, the context of gender relations, and methodologies of social and intellectual history studied within a specific era or topic in American or world history. Offered fall semester 2013.

**HIS 480 - San Diego Urban History**

(4)

Students will focus on a significant social, economic, or political theme in local urban history. Most of the research uses to best advantage the wide range of primary sources located in San Diego area archives. Working with the professor and fellow students, research papers are prepared to professional standards which may lead to publication in a historical journal.

#### **HIS 484 - Ancient and Medieval Christianity**

**(3)**

A study of Christianity from its birth within a mixture of Jewish, Persian, Greek, and Roman cultures through its influence on the birth and development of Europe before the Reformation. The course emphasizes cultural history rather than theological debates. The major themes are missionary strategies, relationships between church and state, models of holiness and Christianity's vital role in the development of books, libraries, curricula, schools, and universities, including the special emphasis Christianity placed on historical confidence in the Bible. The course involves reading and discussing histories written by Luke, Eusebius, Augustine, Bede, and Bonaventure. The course welcomes non-majors.

#### **HIS 486 - Modern Christianity**

**(3)**

A study of the Christian church since the Protestant Reformation, with consideration of American Christianity from its European background to the present.

#### **HIS 487 - The Ancient Historians**

**(4)**

An intensive reading seminar using translations of ancient histories, this course focuses on the history of the Fertile Crescent and the Mediterranean from the beginnings of the Persian Empire to the fall of the Western Roman Empire as told by ancient historians. Use of evidence, conceptions of time and purpose, and the responsibilities of the historian are emphasized along with the narrative presented by historians such as Moses, Herodotus, Livy, Plutarch, Luke, Eusebius, and Tacitus.

#### **HIS 490 - Special Studies in History**

**(1-4)**

An individualized study of a special topic or an internship applying the critical skills of the historian. The project must be approved and supervised by a department faculty member. May be repeated for a maximum of eight units.

Prerequisite(s): Consent of instructor

### **Honors Scholars Program**

#### **HON 100 - Introduction to Christian Scholarship (GE)**

**(1)**

This course introduces students to the Humanities Honors Program. Students will be introduced to the history and

aspirations of the Christian liberal arts and ways that their education as aspiring scholars is situated within the larger context of God's will and purposes for their lives. Students will also be introduced to and participate in various acts of Christian devotion and works of mercy that are important practices of the Wesleyan tradition.

### **HON 399 - Foundations of Independent Research**

**(1-2)**

A course designed to assist students in doing the substantial background work needed to prepare for an honors project. This course is meant to support those students whose majors do not offer other means of preparing the foundation for such projects. This course is not a prerequisite for HON 498 and may be repeated up to a total of 4 units. Graded Credit/No Credit.

Prerequisite(s): Consent of the director of the Honors Scholars Program and the respective department chair/school dean.

### **HON 498 - Honors Project I**

**(2)**

An intensive project to be completed by students who are designated as Point Loma Nazarene University Honors Scholars. The course includes the first stage of a seminal study within a scholar's major under the supervision of a faculty advisor. In the liberal arts tradition, scholars from different disciplines meet together every week to discuss progress on their projects. The interdisciplinary portion of the course includes a workshop on project preparation and presentation. The experience culminates with the scholar's formal presentation of progress to his/her Advisory Committee not later than December 15. Offered each fall. Graded Credit/No Credit.

Prerequisite(s): Normally restricted to students in the senior year with a cumulative grade-point average of 3.500 or higher. Approval of the director of the Honors Scholars program and the department chair/school dean in which the scholar's major is housed.

### **HON 499 - Honors Project II**

**(1)**

A continuation of HON 498. In this course, students meet regularly with their advisor, complete their project, and prepare for two formal presentations: one to their Advisory Committee and a second at the Point Loma Nazarene University Honors Conference held in mid-April. Honors projects are bound and kept as an annual collection in the university's Ryan Library. Offered each spring. Graded Credit/No Credit.

Prerequisite(s): HON 498.

## **Humanities Honors Program**

### **HON 101 - Rhetoric: Critical Communication (GE)**

**(4)**

This course sharpens students' rhetorical skills through research-based written and oral communication assignments. It also introduces to and equips them for critical analysis of various written, oral, and visual media.

### **HON 102 - Introduction to Philosophy (GE)**

(3)

This course will help students develop an openness toward the pursuit of wisdom; nurture creative and reflective thinking by reading significant primary texts within the Western philosophical tradition; examine what it means for us to be human; examine the nature of language and meaning formation; examine ethical issues, such as the nature of courage and humility; introduce several philosophical issues found in the Western tradition including human knowledge, the relationship of the soul to the body, and the meaning of human existence; and wrestle with these issues as they relate to their lives.

**HON 120 - Foundations in Humanities I: Ancient/Medieval (GE)**

(4)

Designed to integrate knowledge of civilizations from the ancient and medieval worlds, this course will incorporate select primary texts that are foundational to the humanities by exploring how key questions regarding the ultimate nature of reality and truth, and what it means to be human are grappled with during these eras from a Christian perspective. The course will include coverage of historical, political, philosophical and literary works, along with important movements and works of music and art from these eras.

**HON 150 - Humanities Honors Abroad (GE)**

(3)

This course serves as an opportunity for students to connect with people groups and learn in cross-cultural settings in an attempt to gain perspectives on both ethnic and cultural diversity and differing worldviews and challenges in the contemporary world. The course will focus on the integration of course materials studied throughout the first year of the Humanities Honors Program in a cross-cultural/global context. Students go abroad during the month of May.

**HON 201 - Old Testament History and Religion (GE)**

(2)

Within the context of the history of Israel, this course provides an overview of the literature of the Old Testament with special attention to its religious and theological meaning. This course (in conjunction with HON 202 in sequential quad terms) highlights the theological unity of the Christian Scriptures, while exploring the literary diversity of the two-testament canon. Taken in conjunction with HON202 in sequential Quad terms.

**HON 202 - New Testament History and Religion (GE)**

(3)

Within the context of Christian origins, this course provides an overview of the canonical literature of the New Testament with special attention to its literary history and theological themes. This course (in conjunction with HON 201 in sequential quad terms) highlights the theological unity of the Christian Scriptures, while exploring the literary diversity of the two-testament canon. Taken in conjunction with HON201 in sequential Quad terms.

**HON 210 - Politics of Race, Class and Gender (GE)**

(4)

This course introduces and analyzes the construction of the social categories of race, class and gender through the lens of Christian faith and assesses how these structures have shaped the experiences of people in the United States and

globally, placing special emphasis on how these categories interact and create intersecting systems of power, privilege and oppression. Students will examine political, historical, legal, and economic bases for the experiences of race, class and gender, as well as use autobiographical materials to understand how individuals experience their particular situations in this matrix.

#### **HON 220 - Foundations in Humanities II: Renaissance/Enlightenment (GE)**

**(4)**

This course explores the key intellectual, artistic, social, religious, and political transformations in Europe in its efforts to comprehend the significance of the discovery of the New World, new ideas in art science and politics, and Europe's expansion into global trade by 1800. It explores changing ideas about God, humanity, and truth during this period from a Christian perspective. The effects of these European transformations on Europeans' relationships to non-European societies is also considered.

#### **HON 310 - Christianity in Global Perspective (GE)**

**(3)**

This course introduces students to the rich depths and diverse expressions of the Christian tradition. Students will learn about the historic roots and development of the Christian church and its theology and practices while engaging the variety of historical and contemporary expressions of Christian faith. Students will be challenged to recognize their own cultural biases even as they are encouraged find practical ways to deepen their commitment to and participation in the Body of Christ.

#### **HON 320 - Foundations in Humanities III: 19th/20th Centuries (GE)**

**(4)**

In this course, students will assess the key intellectual, artistic, social, religious, and political developments in the Western world during the 19th and 20th Centuries from a Christian perspective. They will explore changing ideas about God, humanity, and truth during this period, as well as the effects of these developments on relations between Western and non-Western societies.

#### **HON 350 - Humanities Honors Integrative Seminar (GE)**

**(1)**

This course helps students tie together their various honors experiences and coursework. Through mini-lectures, discussion, and reflective practice, students will consider the major themes of the Humanities Honors program and the relationship between these themes and their personal, spiritual, and intellectual growth. They will also identify possible areas of research interest for development in the Honors Scholars Program (HON 498/499) or within their chosen majors.

### **Journalism and Writing**

Students are placed in introductory writing courses according to SAT verbal and ACT exam scores and a writing assessment administered during the first week of classes.

#### **JRN 215 - Newspaper Workshop**

**(1)**

Writing for publication: techniques and methods of mass communication. Laboratory experience in constructing one or more of the news forms of the weekly student publication: news reporting; feature writing, editorials, photojournalism. Required of staff members of the Point Weekly. JRN215, WRI 216 , JRN 217, JRN 218 and COM 275 may be repeated up to a combined total of eight units.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **JRN 217 - Yearbook Workshop**

**(1)**

Writing for publication. Includes one or more of the following: planning and design, writing and editing, photojournalism, production and distribution. Required of staff members of the Mariner. JRN 215, WRI 216 , JRN217, JRN 218 and COM 275 may be repeated up to a combined total of eight units.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **JRN 218 - Multimedia Workshop**

**(1)**

Hands-on production of an online, student-run media outlet providing both a training ground for students interested in gaining experience in various aspects of digital media as well as high quality news source for PLNU. Open to all students. JRN 215 , WRI 216 ,JRN 217 , JRN218 and COM 275 may be repeated up to a combined total of eight units.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **JRN 250 - Introduction to Journalism**

**(3)**

The study of the philosophy and practice of journalism with an emphasis on news gathering and writing as a process in traditional and current technological formats. Explores broadcasting, electronic media, and the role of journalists in society.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **JRN 310 - Advanced Reporting**

**(3)**

Concentrated application of journalism techniques. Stresses off-campus reporting, interviewing and news gathering, journalism responsibility, and ethics. Addresses the news organization as a business and its impact on the reporter.

Prerequisite(s): JRN 250.

### **JRN 312 - Television News Writing**

**(3)**

This course concentrates on writing news to pictures and sounds. Students do electronic newsgathering (ENG) in the field. Students also write, rewrite, and edit conversational hard news and feature news stories with the distinctive journalistic and production values of television in mind. Offered in the fall semester of odd years typically.

Prerequisite(s): JRN 250, COM 243.

Corequisite(s): COM 313 or JRN 314 .

### **JRN 313 - Television News Production**

**(3)**

Combines principles of journalistic writing and reporting with field production techniques of television news. Students learn the basic concepts of reporting and producing a variety of television news stories, from simple anchor readers to complex packages.

Corequisite(s): JRN 312 and COM/JRN313 are co-requisites and must be taken in the same semester.

Also offered as COM 313 .

### **JRN 314 - Computer-Assisted Reporting**

**(3)**

Introduces students to investigative journalism through hands-on laboratory work, including advanced Web research, public records requests, statistical analysis, databases, mapping, visual aids and data interactives.

Prerequisite(s): JRN 250.

### **JRN 340 - Media Law and Ethics**

**(3)**

The study of major ethical journalistic philosophies, codes, and current practices. Interaction with professionals and discussions of ethical problems. Stresses responsible, fair, accurate journalism.

Prerequisite(s): JRN 250.

### **JRN 345 - Editing**

**(3)**

Designed to develop the student's ability to improve and clarify all forms of written expression. Genres include newspapers, magazines, books, internet, as well as other forms of storytelling.

Prerequisite(s): JRN 250.

### **JRN 350 - Special Topics in Journalism**

**(3)**

Focuses on current aspects of journalism with a different concentration each time it is offered. May be repeated for

credit as content varies up to six units.

Prerequisite(s): JRN 250

### **JRN 355 - Public Relations Writing**

**(3)**

Practice in the planning, research, writing, editing, and evaluation skills needed to craft informative and persuasive messages in various media for various external and internal publics. Formats include print, broadcast, and web-based news releases, features, media kits, public service announcements, radio and video packages, brochures and newsletters, backgrounders and position papers. Offered in the spring semester of even numbered years typically.

Prerequisite(s): JRN 250.

### **JRN 413 - Advanced Television News Production**

**(3)**

Provides students with the theory and organization of newscasts, as well as skills in conducting live news remotes, coordinating newscasts, supervising news personnel, anchoring, using news production software, and applying advanced reporting skills in various news situations.

Prerequisite(s): COM 313 or JRN 314 and JRN 312.  
Also offered as COM 413 .

### **JRN 414 - Long-Form Broadcast News**

**(3)**

Focuses on the development of skills at in-depth storytelling through radio and television news production. Students learn to research, script, and produce stories, while applying aural and visual news presentation techniques.

Prerequisite(s): COM 313 or JRN 314 and JRN 312 .  
Also offered as COM 414 .

### **JRN 425 - Advanced Television Workshop**

**(1)**

Planning, production and presentation of television programming for multiple audiences. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the campus cable TV channel. Required of DRAFT upper division students working as staff for campus television channel. May be repeated up to a total of six units.

Prerequisite(s): COM 243  
Also offered as COM 425 .

### **JRN 430 - Multimedia Journalism**

**(3)**

Students will build a portfolio website and produce advanced multimedia elements for it, blending text, audio, video, photos, data visualizations, and interactivity.

Prerequisite(s): COM 243 and JRN 250.

### **JRN 440 - Magazine Editing and Concepts**

**(3)**

The study of American magazines, including their planning, editing, and designing. the class project involves completing a prospectus and publishing a county-wide magazine.

Prerequisite(s): JRN 250.

### **JRN 470 - Internship in Journalism**

**(2)**

A supervised experience in which the student works off campus in an established media business or public service media company. May be repeated up to a total of four units of credit.

Prerequisite(s): JRN 250 , JRN 340 , and JRN 350 , or consent of instructor.

### **JRN 495 - Senior Seminar in Multimedia Journalism**

**(3)**

Students create a multifaceted assignment that serves as a culminating academic and intellectual experience in the program. Using a variety of contents (text, audio, video, photo, data visualization) students apply the knowledge and skills gained in other journalism courses.

Prerequisite(s): Senior standing or consent of instructor.

### **WRI 097 - Writing Skills Tutorial**

**(0)**

An intensive one-on-one tutorial required of those enrolled in College Composition courses designated as WRI 110, WRI 115, or WRI 116 whose SAT or ACT scores qualify them, or who demonstrate on the assessment exam the need for extra instruction and support regarding the process of writing thesis-based manuscripts. Attention is given to grammatical correctness, sentence-level conventions, thesis construction, and coherence among well developed paragraphs. Includes a laboratory fee.

### **WRI 101 - Writing Across the University**

**(3)**

A first-semester integrative composition experience that serves the PLNU LEAP program. The course emphasizes critical thinking and idea development, and it encourages reflection on a wide array of topics and issues related to writing in the disciplines, all drawn from the first-year experience.

### **WRI 110 - College Composition: Writing and Research - First Year Experience (GE)**

(4)

A comprehensive first-year composition experience in reading, writing, and critical thinking, centered on essay and research writing. the course emphasizes the processes of writing thesis-based manuscripts as an evolving product, with attention to sentence-level conventions and coherence among well-developed paragraphs. Library research and writing the source-based essay are major components of the course.

Prerequisite(s): A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 097.

### **WRI 115 - College Composition: Writing - First Year Experience (GE)**

(3)

A first-year composition experience in reading, writing, and critical thinking, centered on the essay. the course emphasizes the processes of writing thesis-based manuscripts as an evolving product, with attention to sentence-level conventions and coherence among well-developed paragraphs. Must take WRI116 - College Composition: Research to complete the required composition sequence.

Prerequisite(s): A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 097. WRI115 is a pre-requisite for WRI116, College Composition: Research.

### **WRI 116 - College Composition: Research - First Year Experience (GE)**

(2)

A first-year composition experience in reading, writing, and critical thinking, centered on the research essay. the course emphasizes the process of writing as well as the manuscript as an evolving product. Library research and writing the source-based essay are the major components of the course.

Prerequisite(s): WRI 115. A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI097.

### **WRI 216 - Literary Magazine Workshop**

(1)

Hands-on production of PLNU's literary magazine, from theme to finished product. Open to all students. JRN 215, WRI216, JRN 217 ,JRN 218 and COM 275 may be repeated up to a combined total of eight units.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 220 - Introduction to Creative Writing**

(3)

A general introduction and overview of creative writing (including practice in poetry, fiction, drama, and creative nonfiction) that serves majors, potential major, and other interested students. Attention will be given to methodology in teaching creative writing. Non-majors are strongly encouraged to complete Writing 220 before taking WRI 321, WRI 322 or WRI 323.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 315 - Advanced English Composition**

**(3)**

A hands-on study of both rhetorical theory and professional writing techniques, with application to the student's own writing and to the teaching of writing.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 321 - Creative Writing: Poetry**

**(3)**

Comprehensive instruction and guided workshop in writing poetry. Attention is also given to methodology in teaching poetry writing and to finding publication. May be repeated once for **major** credit with instructor's consent.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 322 - Creative Writing: Fiction**

**(3)**

Comprehensive instruction and guided workshop in writing fiction. Attention is also given to methodology in teaching fiction writing and to finding publication. May be repeated once for **major** credit with instructor's consent.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 323 - Creative Writing: Creative Nonfiction**

**(3)**

Comprehensive instruction and guided workshop in creative non-fiction writing, including personal essays and memoirs. Attention is also given to methodology in teaching non-fiction writing and to finding publication. May be repeated once for **major** credit with instructor's consent.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 365 - Writing for Professional Careers**

**(3)**

Strategies for success in business and professional writing, incorporating psychology, theory, and method. Topics include reports, proposals, instructions, resumes, memos, and letters.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 370 - Writing Theory and Pedagogy**

**(2)**

A course designed to educate students in the individualized instruction of writing. the course concentrates on theory and pedagogy and on ways to respond effectively to student writing, in the classroom as well as in a writing center.

Particular attention is given to the concrete application of writing theories to student work.

Prerequisite(s): Fulfillment of the College Composition requirement and LIN 365.

### **WRI 420 - Advanced Writing Workshop**

**(3)**

A senior-level capstone course for Writing majors and an advanced course for non-majors providing guided workshops, advanced practice, and advanced instruction in writing techniques and publication strategies used by professional writers. May be repeated once for **elective** credit with instructor's consent.

Prerequisite(s): WRI 321, WRI 322, or WRI 323.

### **WRI 470 - Internship in Writing**

**(2)**

A supervised experience in which the student works off campus in an established media business or public service media company. Two units. May be repeated up to a total of four units of credit.

Prerequisite(s): JRN 250, JRN 310, JRN 340, and WRI 350, or consent of instructor.

### **WRI 490 - Special Studies in Writing/Journalism**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated to a total of six units.

Prerequisite(s): Consent of instructor and department chair.

### **WRI 499 - Research in Writing/Journalism**

**(1-3)**

Independent research under the guidance of a faculty member.

Prerequisite(s): Consent of instructor and department chair and senior standing.

## **Kinesiology**

### **KIN 101 - Orientation to Kinesiology**

**(1)**

An introductory course dealing with the expectations, opportunities, and the nature of the professions for which students of the department might prepare. Topics addressed include essential computer skills, library and internet search techniques, ethics, issues for women and men in the work place, trends in sport coaching, officiating, sports medicine and physical education, professional organizations, and personal accountability.

### **KIN 280 - Introduction to Athletic Training**

(2)

Recognition and initial care of commonly occurring injuries to active people. Objective methods of determining if a person is able to continue to play following injury or if referral to medical care is required. Special fee.

### **KIN 280L - Introduction to Athletic Training Lab**

(1)

Skill acquisition in the techniques and procedures required of the Athletic Training clinician. Laboratory instruction on techniques of strapping, binding, and wound management. Required of Athletic Training majors. Special fee.

Corequisite(s): KIN 280.

### **KIN 312 - Motor Learning and Motor Development**

(3)

Motor Development: A study of motor, physical, and neuromuscular development from prenatal periods to old age. Motor Learning: A study of factors involved in the learning and performance of motor skills. Laboratory experiences included.

### **KIN 325 - Structural Kinesiology**

(2)

In-depth study of the structure and function of neuro-musculo-skeletal components of the human body in motion. Laboratory experiences included. Offered on a Quad basis.

Prerequisite(s): BIO 130 or consent of instructor.

### **KIN 327 - Applied Biomechanics**

(2)

Quantitative and qualitative assessments of human movement through the use of kinematic and kinetic means. Students apply the physics of motion to the understanding and teaching of movement in the physical activity and rehabilitative contexts. Offered on a Quad basis.

Corequisite(s): KIN 325.

### **KIN 340 - Physiology of Exercise**

(3)

A study of the effects of vigorous physical activity upon the systems of the body; development of an understanding of factors which constitute training of the human body for high levels of health and physical performance. Laboratory experiences included. Special fee.

Prerequisite(s): BIO 140 or consent of instructor.

### **KIN 340L - Physiology of Exercise Lab**

**(1)**

Practical experiences in assessing human physiological responses to exercise and training.

Corequisite(s): KIN 340.

### **KIN 430 - Clinical Exercise Physiology**

**(3)**

Detailed analysis of the effects of exercise on the organ systems of the body. Lecture and laboratory experiences relating to apparently healthy populations as well as those with obesity, diabetes, and metabolic syndrome. Special fee.

Prerequisite(s): KIN 340.

### **KIN 440 - Measurement, Statistics, and Evaluation of Human Performance**

**(3)**

Study of measurement techniques and instruments, descriptive and inferential statistics and evaluation procedures in human performance. Assessment of cognitive, physical, and motor domains through test construction, administration, and interpretation are the central content areas of the course. An original research proposal including statistical design is required.

### **KIN 475 - Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities**

**(3)**

An intensive study of human neuromusculoskeletal structures through cadaveric dissection. Intended for students in advanced standing so that applied biomechanical functions and clinical ramifications can be examined critically and prospectively. Offered only in the summer session.

Prerequisite(s): Consent of Instructor.

### **KIN 484 - Practicum in Kinesiology**

**(1-3)**

An on-campus experience in which the student works with a faculty member to gain experience in the field of Kinesiology. May be repeated for up to a total of six units.

Prerequisite(s): Consent of instructor.

### **KIN 488 - Internship in Kinesiology**

**(1-3)**

An off-campus experience under supervision of a faculty member in which the student gains experience in the field of kinesiology. May be repeated for up to a total of six units.

Prerequisite(s): Consent of instructor.

### **KIN 490 - Special Studies in Kinesiology**

**(1-3)**

An intensive study by an individual or group under the direction of a faculty member of a topic in kinesiology not otherwise studied in the curriculum. Intended for junior or senior students in strong academic standing. May be repeated up to a total of six units.

Prerequisite(s): Consent of instructor and departmental chair.

### **KIN 491 - Research in Kinesiology**

**(1-3)**

Independent investigation under faculty supervision of a specific problem in the field of kinesiology. Intended for junior or senior students in strong academic standing. May be repeated for up to a total of six units.

Prerequisite(s): Consent of department chair.

## **Learning Experiences for Academic Progress (LEAP)**

### **FST 100 - Freshman Studies Seminar I**

**(1)**

This course focuses on time management skills, reading skills, logical organization, note-taking, note rewriting, test-preparation, test-taking, and self-evaluation skills. Students will learn to use Excel to track grades and to use a time management system in order to strategize time use and to develop efficient work habits. Students also work on summary writing, outlining, logical organization of ideas, and critical commentary. Finally, students will engage in a variety of exercises designed to train them in both categorizing and unpacking ideas.

### **FST 101 - Freshman Studies Seminar II**

**(2)**

This course focuses on active reading techniques, critical thinking questions, and applied work in critical thinking. Students will also use critical thinking skills and standardized research tools for self-exploration and career selection.

## **Linguistics**

### **LIN 312 - Introduction to Linguistics**

**(3)**

The nature and structure of language (universals) via the science of linguistics, emphasizing the core areas of phonology, morphology, syntax, and semantics. Also introducing sociolinguistics, language acquisition and development, historical comparative methods, and neurolinguistics.

### **LIN 365 - English Grammar and Usage**

(3)

A descriptive study of English morphology and syntax, focusing mainly on sentence parts and types. Also a study of the rules of standard American usage, which are prescribed by the literate society, and an introduction to text grammar.

### **LIN 490 - Special Studies in Linguistics**

(1-3)

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated up to a total of six units.

Prerequisite(s): Consent of instructor and department chair.

## **Literature**

### **LIT 200 - Literature and Culture (GE)**

(2)

A study of representative works of literature and cultural contexts.

### **LIT 250 - Introduction to the Study of Literature**

(3)

This course introduces the student to the technical study of literature with a threefold emphasis. One, it instructs students in the practice of close reading and literary analysis of all the major genres of literature: poetry, prose (fiction and nonfiction), and drama, giving special attention to close reading and literary analysis of poetry. Two, it requires the study and mastery of literary terms, their definitions and applications. Three, it introduces students to historical literary periods and major schools of literary criticism and their approaches. A more extensive study of literary criticism is completed in LIT 495. Students should use and master more fully Literature 250 course content in subsequent literature courses.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **LIT 252 - World Literatures: Ancient and Medieval Literatures**

(3)

A study of the literary classics of the ancient and medieval periods, including various genres, particularly epic and drama. Focuses on major works of world literatures within their historical/cultural contexts, from the *Epic of Gilgamesh* to Dante's *Divine Comedy*.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 254 - British Writers I**

(3)

Discussion and analysis of major movements, genres, authors, and works within their cultural contexts from 700 to 1798. Includes Beowulf and work by authors such as Chaucer, Julian of Norwich, Malory, Spenser, Lanyer, Marlowe, Shakespeare, Webster, Milton, Behn, Cavendish, Swift, and Pope.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 255 - British Writers II**

(3)

Discussion and analysis of major movements, genres, authors, and works from the 1780s to the present. Includes works by authors such as Wollstonecraft, Blake, the Wordsworths, Coleridge, the Shelleys, Keats, Dickens, the Rossetts, the Brownings, Shaw, Wilde, Eliot, Woolf, Stoppard, and Friel.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 256 - American Writers I**

(3)

A study of American writers from the colonial period to the mid-19th century. Representative writers are Bradstreet, Taylor, Franklin, Poe, Emerson, Thoreau, Douglas, Hawthorne, Melville, Wheatley, Stowe, and Whitman.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 257 - American Writers II**

(3)

A study of American writers from the mid-19th century to the present. Representative writers are Clemens, Crane, Chopin, Frost, Eliot, Hurston, Hemingway, Faulkner, O'Connor, and Morrison.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 325 - Children's Literature**

(3)

Consideration of the major classics and modern works recommended for children, including folk and fairy tales, animal stories, limericks and poetry, fantasy, and realistic stories for older children.

**LIT 350 - World Literature (GE)**

(3)

An advanced study of works, primarily in translation. The course focuses on selected themes, topics, and/or eras and places the works in their cultural contexts.

Prerequisite(s): Fulfillment of the College Composition requirement, LIT 200 , and Junior or Senior standing.

**LIT 351 - World Cinema (GE)**

**(3)**

An advanced study of representative works of world cinema. Class inquiry focuses on film narrative, art, and theory. Includes a variety of eras and genres, placing the works within their cultural contexts.

Prerequisite(s): Fulfillment of the College Composition requirement, LIT 200 , and Junior or Senior standing.

**LIT 352 - Diverse Voices in American Literature (GE)**

**(3)**

An advanced study of selected works written by Americans who have lived on and written from the margins of American society.

Prerequisite(s): Fulfillment of the College Composition requirement, LIT 200 , and Junior or Senior standing.

**LIT 353 - Women Writers (GE)**

**(3)**

An advanced study of selected works written by women; themes and genres studied may vary. The course focuses on questions related to gender, class, and race.

Prerequisite(s): Fulfillment of the College Composition requirement, LIT 200 , and Junior and Senior standing.

**LIT 400 - American Literature to 1900**

**(3)**

An advanced study of selected authors and movements in American literature from its origins until 1900. The course will offer students the opportunity to study a limited number of texts in greater depth than is possible in a survey course.

Recommended: Completion of LIT 250 and LIT 256 .

**LIT 420 - American Literature Since 1900**

**(3)**

An advanced study of selected authors and movements in American literature since 1900. The course will offer students the opportunity to study a limited number of texts in greater depth than is possible in a survey course.

Recommended: Completion of LIT 250 and LIT 257 .

**LIT 444 - Medieval Literature**

**(3)**

A study of British literature from 1100 through 1500, including Chaucer, Langland, the Gawain Poet, Marie de France, Julian of Norwich, and Mallory, and covering medieval drama, poetry, prose, romance, and tale. Students learn to read Middle English as well as the historical, religious, and social contexts of the literature.

Prerequisite(s): LIT 254.

Recommended: LIT 250.

#### **LIT 445 - 17th Century English Literature**

**(3)**

A study of British literature primarily from 1603 to 1688, focusing on the Scientific Revolution, the beginnings of modernism, the rise of women writers and discussions concerning gender, major religious movements, and the English Civil War.

Recommended: LIT 250.

#### **LIT 446 - Romantic Literature**

**(3)**

A study of the poetry, fiction, non-fiction prose, and drama of the Romantic Age (1780-1830), focusing on issues of the French Revolution, the rights of women, the abolition of the slave trade and slavery, the rise of democracy, industrialization and science, the philosophy of art, and the rise of new literary forms such as the Greater Romantic lyric and the gothic.

Recommended: LIT 250 and LIT 255.

#### **LIT 447 - Victorian Literature**

**(3)**

A study of the fiction, non-fiction prose, poetry, and drama of the Victorian age (1837-1901), focusing on the period's dominant issues of Industrialization, Imperialism, the Woman Question and Sexuality, the Crisis of Faith and Science, and Aesthetics and Art's role in society.

Recommended: LIT 250 and LIT 255.

#### **LIT 448 - Postcolonial Classics and Theory**

**(3)**

An advanced study of selected post-colonial literature and post-colonial theory from the turn of the 19th century through 21st century. Class inquiry focuses on the effects of empire, colonization, neocolonialism, and globalization presented in these texts.

Recommended: Completion of LIT 250 and LIT 255.

#### **LIT 450 - The Novel**

**(3)**

An advanced study of representative examples of the novel. Selected novels may include both novels written in English and novels translated into English.

Recommended: Completion of LIT 250 .

#### **LIT 461 - Shakespeare**

**(3)**

A study of Shakespeare's comedies, histories, and tragedies within their cultural contexts, with special attention paid to rhetorical analysis and theatricality, as well as coverage of the political, philosophical, and religious implications of the plays.

Recommended: Completion of the general education literature requirement and LIT 250.

#### **LIT 490 - Special Studies in Literature**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated to a total of six units.

Prerequisite(s): Consent of instructor and department chair.

#### **LIT 495 - Literary Theory and Scholarship**

**(3)**

This capstone course provides an in-depth study of contemporary critical trends such as Structuralism, New Historicism, Feminism, Deconstruction, Gender Studies, Reader-response and Psychoanalytic criticism. Students also familiarize themselves with the critical commonplaces to which these new approaches are a response as well as with a traditional overview of trends and styles from medieval through modern literature. Students are expected to engage in some research and in written critical work. Preparation of a portfolio and summative evaluation is an important part of this class.

Prerequisite(s): LIT 250 and senior standing.

#### **LIT 499 - Research in English**

**(1-3)**

Independent research under the guidance of a faculty member.

Prerequisite(s): Consent of instructor and department chair and senior standing.

### **Los Angeles Film Studies Center Courses**

The Los Angeles Film Studies Center (LAFSC) is a selective, off-campus cooperative program sponsored by the Council for Christian Colleges and Universities (CCCCU) in partnership with Point Loma Nazarene University. Students must meet academic requirements and exhibit Christian commitment in order to be recommended to the program by

PLNU, and the final selection is made by LAFSC. The program is open to students from any field of study and credits may be counted toward completion of the Media Communication major.

The following courses are offered at LAFSC only and are available to full-time students who have been accepted into the off-campus program:

**COM 371 - Professional Acting for the Camera**

**(3)**

An advanced workshop in the practice and process of acting for the camera aimed at students who have a desire to pursue acting as a career. Instruction includes an overview of current camera acting techniques and thorough discussion of the art of acting. The class primarily consists of acting scene work with all scenes being filmed and critiqued on the big screen. Students will also be required to pursue roles in student and independent films. Several class sessions throughout the course will be devoted to the business of acting for film and television in the Hollywood entertainment industry with an emphasis given to developing the materials and relationships necessary for a successful career.

**COM 470 - Hollywood Production Workshop**

**(4)**

A series of lecture/discussions focused on the development and integration of a Christian world-view as it relates to the Hollywood entertainment industry.

**COM 471 - Faith and Artistic Development in Film**

**(3)**

A study of the relationship between film and popular culture, with emphasis on Christianity's role in these arenas. the course examines how faith, film, and culture mutually influence one another.

**COM 472 - Internship: Inside Hollywood**

**(3/6)**

Students participate in an internship experience in some aspect of the Hollywood film or television industry. These are non-paying positions primarily in an office setting such as development companies, agencies, personal management companies, production offices, etc. Orientation to the internship includes an overview of the creative and operational aspects of the Hollywood entertainment business, including the role of the Christian in entertainment.

Prerequisite(s): Consent of instructor.

**COM 473 - Narrative Storytelling**

**(3)**

An introduction to the theory and practice of motion picture filmmaking. Topics include familiarity with filmmaking equipment; basic motion picture techniques; converting idea to image; the use of lighting, editing and sound in film; and the role of acting, directing, and good storytelling in the filmmaking process.

**COM 474 - Professional Screenwriting**

**(3)**

An introduction to contemporary screenwriting, including an understanding of dramatic structure, character and dialogue development, and the writing process. Students complete a full-length screenplay for a feature film or “movie-of-the-week.” Emphasis is given to the role of Christian faith and values as they relate to script content.

#### **COM 475 - Seminar in Producing the Independent Film**

**(3)**

An introduction to the process of producing an independent feature film. Topics include legal structures, business plans, preproduction activities such as scheduling and budgeting, and an overview of the producer’s role in production, post-production, and distribution.

#### **COM 476 - Acting in Hollywood**

**(3)**

An introduction for the practice of acting in the Hollywood entertainment arena. Topics include the role of agents, managers, casting directors and the unions; equity waiver theatres and showcases; photos and resumes and an exploration of the audition process used for commercials, live theatre, film, and television.

### **Management**

#### **MGT 212 - Principles of Management**

**(3)**

A study of the manager's role in the organization, including the tasks of planning, organizing, leading, and controlling. Topics include an introduction to change and innovation, corporate culture, global business, ethics, corporate social responsibility, organizational structure, decision-making, human resources and leadership.

Prerequisite(s): BUS 100

#### **MGT 320 - Organizational Behavior**

**(3)**

This course is a study of human behavior in social organizations, with a focus on the environment, structure, and human behavior at the individual, group, and organizational level. Emphasis is on acquiring skills and analytical concepts to improve organizational relationships and effectiveness.

Prerequisite(s): MGT 212

#### **MGT 374 - Human Resource Management**

**(3)**

This course provides an overview of the human resources function in organizations, and related elements and activities. Topics include talent acquisition, compensation, performance appraisal, employment law, training and development,

labor relations, and industrial organizational psychology.

Prerequisite(s): MGT 212

### **MGT 381 - Creativity and Innovation**

**(3)**

This course provides an understanding of the critical role of creativity and innovation in the development of new products or services. Students will explore how to develop an entrepreneurial mindset and an innovative culture within an organizational structure. The overall impact of ideation and how to implement and/or commercialize an innovative idea will also be addressed.

Prerequisite(s): MGT 212

### **MGT 382 - Applied Entrepreneurship**

**(3)**

This course provides an understanding and application of the fundamentals of entrepreneurship and the entrepreneurial mindset. Students will learn the series of steps required to take an original idea to a sustainable business concept. In addition, students using an intrapreneurial mindset will collaborate with a local business to add value to their existing business strategy. Students will apply factors that are involved in a startup environment including opportunity recognition, competitive forces, venture context, risk and the importance of human capital for entrepreneurial success.

Prerequisite(s): MGT 381 or consent of instructor.

### **MGT 412 - Leadership Theory and Practice**

**(3)**

This course provides an investigation and review of a wide variety of leadership concepts, practices and theories. Topics include the role of leadership in organizations, the historical examination of various leadership models, the contributions of leaders to a modern society, and an examination of biblical leadership. Emphasis will be placed on practical applications of leadership.

Prerequisite(s): MGT 212

### **MGT 416 - Perspectives on Leadership**

**(3)**

This course investigates and presents various perspectives and strategies associated with leadership. It focuses on the integration of faith, ethics, and character in the practice of effective leadership in business and other organizational settings. This course will include the reflection, analysis and discussion of various readings on leadership, faith and ethics, and the perspective on leadership from a wide range of special guest speakers.

### **MGT 470 - Nonprofit Organization Management**

**(3)**

This course applies management principles to nonprofit organizations. Topics include managing volunteers, advising

board of directors, accounting, investment, financial management, marketing, fund raising, ethics and responsibility to society and donors.

Prerequisite(s): MGT 212 or consent of instructor.

### **MGT 484 - Operations Management**

**(3)**

This course provides an analysis of the information support systems which aid the manager in the decision-making process. Topics include supply chain, project and operations management, allocation of resources, planning and financial analysis.

Prerequisite(s): MTH 203 or consent of instructor, and MGT 212  
Senior Standing Only.

### **MGT 488 - Strategic Management**

**(3)**

This course serves as a capstone experience for business students. It seeks to integrate the diverse areas of business study through formal instruction, a competitive business simulation, case analysis and in-depth analysis of current problems facing businesses. Consideration is also given to the policy development process, corporate social responsibility, and the highest purposes of business.

Pre or Corequisite: FIN 335, MGT 488L and Senior standing.

### **MGT 488L - Strategic Management Lab**

**(0)**

This lab is a required companion to the MGT488 capstone course for seniors in the Fermanian School of Business. The lab consists of a comprehensive exam assessing knowledge in business disciplines. Students must pass the exam in order to graduate. Students who do not pass the exam will be required to complete a comprehensive project under the supervision of the Dean of the Fermanian School of Business (or the Dean's designee).

Pre or Corequisite: MGT 488

### **MGT 490 - Special Topics in Management**

**(3)**

Study in a special topic to be determined by the school. Open to juniors and seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **MGT 491 - Independent Studies in Management**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for

study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Marketing**

### **MKT 332 - Principles of Marketing**

**(3)**

A study of the role of marketing in the organization, in society, and in a global economy. Topics include market analysis, consumer and business marketing, product planning, pricing, distribution, promotion, and ethical issues. Special emphasis will be given to marketing strategy formulation.

### **MKT 333 - Consumer and Organizational Buying Behavior**

**(3)**

A study of how individuals process information and make purchase decisions. Topics include internal influences such as consumer psychology and personality, and external influences such as social environment and situational influences. A qualitative research study will provide special emphasis on understanding buying behavior to develop a marketing strategy.

Prerequisite(s): MKT 332

### **MKT 334 - Professional Selling and Sales Management**

**(3)**

Overview of the role of a sales person and of the sales function. Development and execution of sales presentation with attention to prospecting, sales call planning, the approach, the presentation, negotiation, closing and after-sale follow-up and service. Selected sales management topics include recruiting, training, motivating, and evaluating salespeople, as well as ethical issues and perspectives.

Prerequisite(s): MKT 332

### **MKT 336 - Integrated Marketing Communications**

**(3)**

A study of the marketing communications function. Topics include creative strategy, direct marketing, media strategy, advertising, public relations, promotional program, budgeting and effectiveness, and ethical issues. Special emphasis will be given to developing an integrated marketing communications plan.

Prerequisite(s): MKT 332

### **MKT 350 - Social Media and Digital Marketing**

**(3)**

A study of the social media and digital marketing issues relevant to marketers. Topics include the use of social media platforms to develop customer relationships, digital elements of marketing variables, e-consumer behavior, website development issues, analytics, measurement, and search engine marketing.

Prerequisite(s): MKT 332

### **MKT 432 - Marketing Research**

**(3)**

A study of research methods for gathering, analyzing, and reporting research to support marketing decision-making. Topics include qualitative and quantitative research methods, data sources and collection methods, best practices in writing marketing research surveys and interpreting research results. Students will have the opportunity to define a business problem, develop a research plan, collect and analyze data and present the findings and implications.

Prerequisite(s): MTH 203 or consent of instructor and MKT 332

### **MKT 460 - Marketing Strategy**

**(3)**

This course is designed as a capstone course in the Marketing major to develop skills in strategic marketing management. Topics include the analysis of market opportunities, marketing mix decisions and implementation of effective marketing strategies. Special emphasis will be given to market analysis and marketing strategy formulation, the articulation of marketing strategy in a formal marketing plan, marketing ethics, and career development in marketing.

Prerequisite(s): MKT 332 , MKT 333 , MKT 334 , MKT 336 , MKT 350 , and MKT 432  
Senior Standing Only.

### **MKT 490 - Special Topics in Marketing**

**(3)**

Study in a special topic to be determined by the school. Open to juniors and seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **MKT 491 - Independent Studies in Marketing**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Mathematics**

**MTH 099 - Elementary Algebra**

**(3)**

An introduction to algebra, including a study of the real number system, solutions of linear and quadratic equations, polynomials, factoring, systems of equations, graphing, inequalities, and radicals. Note: This course does not count toward the minimum 128 units required for graduation.

**MTH 113 - College Algebra**

**(3)**

A review and extension of elementary algebra, solutions of linear and quadratic equations, radicals, inequalities, linear and quadratic functions, polynomial functions, exponential and logarithmic functions, conic sections, sequences and series and graphing. Offered every semester.

Prerequisite(s): MTH 099 (or equivalent).

**MTH 121 - Calculus and Modeling**

**(1)**

An introduction to mathematical modeling using mathematical concepts from Calculus I. Graded Credit/No Credit.

Prerequisite(s): A score of 3 or more on AP 114 or AP 115 or credit for a calculus course from another institution.

**MTH 131 - Computer Aided Calculus**

**(1)**

Introduction to the use of a computer algebra system to complement the knowledge of calculus.

Prerequisite(s): MTH 144 or a score of 3 or higher on AP 114 or AP 115.

**MTH 133 - Pre-Calculus**

**(3)**

An introduction to the functions necessary for the study of calculus with an emphasis on numericals and graphical notions of continuity, limits and derivatives. the following function types are used as examples for the study of the concepts: polynomial, rational, exponential, logarithmic, and trigonometric functions.

Prerequisite(s): MTH 113 or equivalent.

**MTH 144 - Calculus With Applications (GE)**

**(4)**

Differential and integral calculus of the elementary functions of one variable. Limits, continuity, derivatives, integrals, and applications.

Prerequisite(s): MTH 123 or MTH 133, or equivalent.

**MTH 153 - Mathematical Analysis for Business and Economics**

(3)

This course focuses on learning and using basic mathematical tools that are fundamental to business applications. Applications of these tools include: supply and demand, optimization, cost-benefit analysis, equilibrium (systems of equations), interest, and loan amortization.

Prerequisite(s): MTH 113 or equivalent

**MTH 164 - Calculus I (GE)**

(4)

Calculus of the elementary functions of one variable. Limits, continuity, derivatives, methods of integration and applications.

Prerequisite(s): MTH 123 or MTH 133, or equivalent.

**MTH 173 - Business Calculus (GE)**

(3)

A calculus course intended for those studying business economics, or other related business majors. This course covers differential and integral calculus of elementary functions with an emphasis on business applications. This is a brief calculus course and not appropriate for students majoring in science, computer science or mathematics.

Prerequisite(s): MTH 113 or equivalent

**MTH 174 - Calculus II**

(4)

A continuation of Calculus I supported by the use of computer graphics and a symbolic computer algebra system. Methods of integration, sequences, series, elementary differential equations, polar coordinates and parametric equations.

Prerequisite(s): MTH 144 or MTH 164.

**MTH 203 - Introduction to Statistics**

(3)

A first course in statistics for the general student. Description of sample data, probability theory, theoretical frequency distributions, sampling, estimation, and hypothesis testing. Not applicable toward a major in Mathematics.

Prerequisite(s): MTH 099 or equivalent.

**MTH 213 - Fundamentals of Elementary Mathematics I**

(3)

A comprehensive approach to the mathematical knowledge necessary for a California multiple subject teaching credential (K-8). Topics covered in this course include whole numbers, numeration systems, fractions, decimals, ratios, proportions and an introduction to number theory. The integers, rational numbers, irrational numbers and real numbers are studied along with algebraic expressions, inequalities, graphs and polynomials. This class is highly interactive and emphasizes group work and cooperative learning. Not applicable toward a major in Mathematics. Passing an 8th grade mathematics proficiency test is a requirement for the completion of this course.

Prerequisite(s): MTH 113 or equivalent.

### **MTH 223 - Fundamentals of Elementary Mathematics II**

(3)

A continuation of Mathematics 213 focusing on additional knowledge necessary for a California multiple-subject teaching credential (K-8). Topics covered in this course include data analysis and statistics, probability, combinations and permutations, simulations as well as standard and non-standard measurement. Planar and three dimensional geometry and geometric constructions are studied, including an algebraic approach to geometry. This class is highly interactive and emphasizes group work and cooperative learning.

Prerequisite(s): MTH 213.

### **MTH 233 - Linear Algebra**

(3)

A computational introduction to linear algebra with applications. A study of linear equations, matrix algebra, Euclidean spaces and subspaces, vector spaces, linear transformations, eigenvalues, eigenvectors, and inner products.

Prerequisite(s): MTH 144 or MTH 164.

### **MTH 242 - Number Theory with Proofs**

(2)

An introduction to proofs using the study of natural numbers, integers, prime factorization, divisibility, congruences, multiplicative functions, continued fractions, quadratic residues. Methods used include investigation, conjecture, inductive and deductive proofs. Offered on a Quad basis.

Prerequisite(s): MTH 174

### **MTH 274 - Calculus III**

(4)

Conceptual development of the calculus of functions of more than one variable supported by the use of a symbolic computer algebra system. Limits and continuity, partial derivatives, chain rule, extreme values, Taylor's theorem, multiple integrals, line and surface integrals, Green's Theorem and Stokes' Theorem.

Prerequisite(s): MTH 174.

### **MTH 303 - Problem Solving (GE)**

**(3)**

A general education course whose major goal is to develop the ability to solve non-routine problems through dynamic processes of inquiry and exploration, logical reasoning, making and testing conjectures and investigating implications of conclusions. A study of quantitative reasoning with emphasis on active problem solving and developing connections with other disciplines. Not applicable toward a major in Mathematics.

Prerequisite(s): MTH 099 or equivalent and Junior or Senior standing.

### **MTH 333 - Differential Equations**

**(3)**

Ordinary differential equations, solutions by analytical and numerical methods in the context of real world applications. A brief introduction to partial differential equations and Fourier series.

Prerequisite(s): MTH 274.

### **MTH 343 - Discrete Mathematics**

**(3)**

Sets, functions, propositional logic and switching theory, graphs including trees, matrices, induction and proof by contradiction, combinatorics, and probability. Selected applications from computer science included. Alternating Years. Offered 2017-18.

Prerequisite(s): MTH 144 or MTH 164.

### **MTH 352 - History of Mathematics**

**(2)**

Development of mathematics from pre-Greek to recent times. Perspectives and contributions of persons from diverse cultural, ethnic, and gender groups. Impact of culture on mathematical progress. Alternating Years. Offered 2018-19.

Prerequisite(s): MTH 144 or MTH 164.

### **MTH 363 - Calculus Based Statistics With R**

**(3)**

A first course in descriptive and inferential statistics for general students who have taken calculus. Topics include experimental design, sampling and sampling distributions, estimation and hypothesis testing. This course also provides a basic introduction to statistical analysis in the statistical software package R. Not applicable toward a major in Mathematics.

Prerequisite(s): MTH 144 or MTH 164 or equivalent.

### **MTH 373 - Mathematical Modeling**

**(3)**

A problem based course that explores mathematical modeling techniques using a variety of computational methods. Also examines how mathematics can be applied to answer specific questions. Includes problems from biology, chemistry, physics, business and other non-mathematical disciplines. Written report and oral presentation are required. Alternating Years. Offered 2018-19.

Prerequisite(s): MTH 274 and MTH 383.

### **MTH 383 - Mathematical Probability and Statistics**

**(3)**

A first course in probability and statistics for students with sophisticated mathematics exposure. Topics include axioms of probability, random variables, discrete and continuous distributions, mathematical expectation, limit theorems, least square estimates of parameter, linear regression, experimental design, hypothesis testing, and confidence of intervals, testing of models, data analysis and appropriateness of models. Topics are supported by the use of statistical software. Offered Yearly.

Prerequisite(s): MTH 274.

### **MTH 402 - Topics in Geometry**

**(2)**

A study of the foundations of geometry, Affine, non-Euclidean and projective geometries. A synthetic development of advanced Euclidean geometry including geometric transformations, convexity, and constructions. Alternating Years. Offered 2018-19.

Prerequisite(s): MTH 144 or MTH 164.

### **MTH 413 - Complex Analysis**

**(3)**

Complex numbers, analytic functions, integration, series, contour integration, residues and conformal maps. Alternating Years. Offered 2017-18.

Corequisite(s): MTH 274.

### **MTH 424 - Real Analysis**

**(4)**

Real numbers, topology of Euclidean  $n$ -space, continuity, differentiation and integration theory. Alternating Years. Offered 2017-18.

Corequisite(s): MTH 233 and MTH 242 and Junior standing.

### **MTH 444 - Abstract Algebra**

**(4)**

A study of groups, rings, fields and related structures with selected applications. Alternating Years. Offered 2018-19.

Corequisite(s): MTH 233 and MTH 242 and Junior standing.

**MTH 471 - History of Mathematics Study Tour**

**(1)**

This course is conducted as a European trip (countries vary). The course uses specific museums, library collections and historic sites to investigate the development of mathematics in relation to specific problems. Lectures and meetings are held during the semester and a series of lectures by the professor and others are presented on location. Alternating Years. Offered 2017-18.

Prerequisite(s): Consent of the instructor.

**MTH 481 - Senior Seminar in Mathematics**

**(1)**

This one-unit capstone course is a seminar in which faculty members, some guests, and the students give lectures on topics of general interest in mathematics. Graded Credit/No Credit.

Prerequisite(s): One of CSC 495 , CSC 498 , ISS 495 , ISS 498 , MTH 495 , MTH 498 , HON 498 or ISS 472 and Senior standing (or Junior standing if a December graduate).

**MTH 491 - Independent Study in Mathematics**

**(1-4)**

Study of a selected problem or topic under the direction of an instructor. The instructor and student propose the course of study. Approval by the department chair is required. May be repeated for a total of six units.

Prerequisite(s): Consent of instructor.

**MTH 492 - Special Topics in Mathematics**

**(2)**

Study of an area of mathematics not otherwise included in the curriculum. The needs and interests of students and faculty involved determine the topics. May be repeated for a total of six units.

Prerequisite(s): Consent of instructor.

**MTH 495 - Service Learning in Mathematics**

**(3)**

Students working in teams design and implement a project using a broad spectrum of mathematical knowledge to meet the needs of a community organization or the university.

Prerequisite(s): Consent of instructor and Junior standing.

### **MTH 498 - Independent Research in Mathematics I**

**(2)**

Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, consent of instructor, and Junior standing.

### **MTH 499 - Independent Research in Mathematics II**

**(1)**

The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, MTH 498 and consent of instructor.

## **Multiple Subject Preliminary Credential**

### **EDU 4CP1 - Elementary Clinical Practice Seminar I**

**(1)**

This seminar course supports the Clinical Practice I experience through classroom inquiry and reflection of the principles of effective classroom management, teaching methods, differentiation of instruction, lesson planning and delivery, and parent communication. Emphasis is placed on the modification of lessons and instructional support of English learners, diverse learners, and learners with exceptionalities. Candidates explore school and community demographics and consider methods for teaching diverse populations. It is through this course that each candidate completes the Cal TPA task "Assessing Learning" as a performance-based measure of the knowledge and skills taught in this course.

Corequisite(s): EDU 440

Offered as EDU6CP1

### **EDU 4CP2 - Elementary Clinical Practice Seminar II**

**(1)**

This seminar course supports the Student Teaching II experience through classroom inquiry and reflection of the principles of effective classroom management, teaching methods, differentiation of instruction, lesson planning and delivery, and parent communication. Emphasis is placed on further development of skills in the modification of lessons and instructional support of English learners, diverse learners, and learners with exceptionalities. Candidates continue to explore school and community demographics and consider methods for teaching diverse populations. It is through this course that each candidate completes the CalTPA task "Culminating Teaching Experience" as a performance-based measure of the knowledge and skills taught in this course. Credit/No Credit

Corequisite(s): EDU 460  
Offered as EDU6CP2.

### **EDU 409 - Classroom Assessment and Research Practices**

**(3)**

This methodology course analyzes assessment types, practices, and instruments used to evaluate student academic achievement utilizing formative, summative, formal, informal, as well as classroom-based and standardized measures. Candidates apply the knowledge and skills to design both whole class and differentiated instruction and assessments based on learner profiles. The relationship between theory and practice provides the basis for reflection to encourage application of research-based assessment strategies in the classroom. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse leaders, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied. Technology for teaching and learning is integrated in the course.

Offered as EDU 603.

### **EDU 412F - Fieldwork for Differentiated Mathematics Instruction for All Learners**

**(0.5)**

This course requires 15 clock hours of observation and participation specific to math instruction in a culturally diverse and inclusive school setting. Graded Credit/No Credit. Candidates are responsible for transportation to and from the school site.

Corequisite(s): EDU 324  
Offered as EDU 612F

### **EDU 420F - Fieldwork for Methods of Teaching Reading and Writing**

**(0.5)**

Candidates work with a small group in the area of literacy under the direction of a cooperating teacher. This course requires 15 clock hours of participation in a classroom specific to literacy instruction in a culturally diverse and inclusive school setting. Graded Credit/No Credit. Candidates are responsible for transportation to and from the school site

Corequisite(s): EDU 420  
Offered as EDU 610F.

### **EDU 422 - Interdisciplinary Approaches to Teaching in the Content Areas**

**(3)**

This methodology course emphasizes a cross-curricular approach to content-based instruction through critical thinking skills, basic analysis skills, study skills and specific teaching strategies and methodology for active forms of learning. The process of interrelation of ideas and information within and across science, social studies, health and physical education utilizing the academic content standards is emphasized. Included in this course is the integration of reading, writing, listening, and speaking across content areas. Instruction is aligned to the state adopted content standards (K-8) and the language needs of all learners. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and

formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied. Technology for teaching and learning is integrated in the course.

Offered as EDU 611.

### **EDU 440 - Elementary Clinical Practice I**

**(4)**

This Clinical Practice experience provides the candidate with an opportunity to work directly with learners in a university-assigned elementary classroom with a Cooperating Teacher. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver instruction in the elementary classroom. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communication. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. This course is graded Credit/No Credit. The Clinical Practice experience contributes to the candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Prerequisite(s): Approval to student teach and completion of all Teacher Education admission requirements, EDU 304, EDU 306, EDU 324, EDU 402, EDU 420, EDU 420F, EDU 422, EDU 412F

Corequisite(s): EDU 431

Offered as EDU 630

### **EDU 460 - Elementary Clinical Practice II**

**(4)**

This course is the second Clinical Practice teaching experience. Student Teachers are assigned to a different content area and/or grade level in an elementary classroom than in the first Clinical Practice experience with an approved Cooperating Teacher. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver instruction in this new elementary classroom setting. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communication. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. Graded Credit/No Credit. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Prerequisite(s): Successful completion of Clinical Practice I and completion of all Teacher Education admission requirements.

Corequisite(s): EDU 4CP2

Offered as EDU 634.

## **Music Composition**

### **MUC 252 - Private Composition**

**(1-2)**

Introductory lessons in music composition. Develops basic concepts of melodic writing and the manipulation of diverse

harmonic, textural and rhythmic materials. May be repeated up to a total of 4 units. Offered every fall and spring semester.

### **MUC 352 - Private Composition**

**(1-2)**

Continued study of compositional processes through the exploration of nontraditional tonal materials; includes introductory compositional experiences that utilize electronic media. May be repeated up to a total of 4 units. Offered every fall and spring semester.

Prerequisite(s): MUC 252.

### **MUC 452 - Private Composition**

**(1-2)**

Development of compositional skills through handling extended forms and larger performance forces, such as choir, band or orchestra. May be repeated up to a total of 4 units. Offered every fall and spring semester.

Prerequisite(s): MUC 352.

### **MUC 477 - Senior Recital in Composition**

**(0)**

A public recital of original compositions, forty-five minutes in length. Offered every fall and spring semester.

Prerequisite(s): MUC 452.

### **MUC 495 - Seminar in Composition**

**(1-2)**

Provides for special courses offered as an adjunct to the curricula. Offered on demand.

## **Music Education**

### **MUE 201 - Woodwind Instruments**

**(1)**

A laboratory class in playing the woodwind instruments with emphasis on teaching and basic repair techniques. Offered spring semester of odd years.

### **MUE 202 - Brass Instruments**

**(1)**

A laboratory class in playing brass instruments with emphasis on teaching and basic repair techniques. Offered fall semester of odd years.

**MUE 203 - Percussion Instruments**

(1)

A laboratory class in playing the percussion instruments with emphasis on teaching and basic repair techniques. Offered fall semester of even years.

**MUE 204 - String Instruments**

(1)

A laboratory class in playing the string instruments (violin, viola, cello, bass) with emphasis on teaching and basic repair techniques. Offered spring semester of even years.

**MUE 303 - Choral and Vocal Techniques**

(2)

Includes a study of choral rehearsal procedures and programming, the development of tone and classification of voice types. Contents include developing vocal technique and vocal health. Offered fall semester of odd years.

Corequisite(s): Music Education majors must register for MUA 312.

**MUE 310 - Vocal Pedagogy**

(2)

Develops conceptual understanding and methodology for the teaching of singing. the course includes an anatomical study of the vocal mechanism with emphasis upon the development of breath support and vocal resonance. Offered fall semester of even years.

**MUE 311 - Piano Pedagogy I**

(2)

A survey of the methods and materials used in teaching the piano, with special emphasis upon teaching elementary students and the adult beginner. Includes observation of private and class piano teaching. Offered fall semester of even years.

**MUE 312 - Instrumental Pedagogy**

(2)

Practical study of the teaching of applied instrumental performance skills. Includes relevant studies of the physiological mechanics of playing technique. Provides survey of teaching literature, learning theory and methodology. Offered on demand.

**MUE 341 - Music Skills for the Elementary Classroom Teacher**

**(3)**

Methods and materials for teaching music for the elementary classroom teacher. Elementary music theory: notation, meter, rhythm, scales, intervals, triads. Introduction to playing skills on classroom instruments such as piano, autoharp, recorder. Introduction to teaching strategies of Orff, Kodaly, Dalcroze, and Suzuki. Strategies for incorporating music into the everyday classroom are taught. Designed primarily for the elementary school teacher. Offered every fall and spring semester. Not for Music majors.

**MUE 411 - Piano Pedagogy II**

**(2)**

A continued study of pedagogical methods for teaching intermediate level piano students. Includes supervised practice teaching experience and survey of teaching literature. Offered fall semester of odd years.

**MUE 441 - Elementary School Music Methods**

**(3)**

Methods of teaching public school music in the elementary grades. Offered spring semester of even years.

Prerequisite(s): MUT 121.

**MUE 451 - Internship in Music**

**(2)**

Supervised internship in the student's major concentration. May be repeated up to a total of 4 units. Offered on demand.

Prerequisite(s): Consent of instructor.

**MUE 454 - Secondary School Music Methods**

**(3)**

Methods of teaching public school music in the junior and senior high school and the California Framework in Visual and Performing Arts are explored. Offered fall semester of even years.

Prerequisite(s): MUA 312.

**MUE 490 - Special Studies in Music Education**

**(1-2)**

Intensive study of a selected problem, under the direction of a department faculty advisor. Offered on demand.

Prerequisite(s): Consent of department chair.

**MUE 495 - Seminar in Music Education**

**(1-2)**

Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in class schedule. Repeatable up to 8 units (can be taken once a semester). Offered on demand.

## **Music Ensemble**

### **MUP 332 - Chamber Orchestra**

**(1)**

Open to community and all students by audition; campus appearances; may accompany large choral works. Participation required of all Music majors with string instrument concentration. May be repeated each semester. Offered every fall and spring semester.

### **MUP 333 - Concert Band**

**(1)**

Open to all students by audition; participation required of all music majors with a concentration in a wind or percussion instrument; varied repertoire represents the best literature; local and off-campus concerts. May be repeated each semester. Offered every fall and spring semester.

### **MUP 334 - Choral Union**

**(1/2)**

Open without audition to the university community; a mixed choir which performs choral works of all types; required, without registration or credit, of all members of the Concert Choir and the Point Loma Singers. May be repeated each semester. Offered every fall and spring semester.

### **MUP 336 - Chorale**

**(1/2 – 1)**

Membership by audition. A mixed chorus open to any student. Music majors must register for one unit. One-unit registration includes participation in Choral Union. Local performances scheduled. May be repeated each semester. Offered every fall and spring semester.

### **MUP 337 - Concert Choir**

**(1)**

With membership by audition, Concert Choir is a mixed chorus open to any student. Includes participation in Choral Union. an annual tour and local public performances are scheduled. May be repeated each semester. Offered every fall and spring semester.

### **MUP 338 - Point Loma Singers**

**(1)**

With membership by audition, Point Loma Singers is a chamber choir of sixteen mixed voices open to all students. Includes participation in Choral Union. Local performances scheduled. May be repeated each semester. Offered every fall and spring semester.

**MUP 339 - Small Ensemble**

**(1/2)**

With membership by audition, this group studies select literature that is determined by the size and type of ensemble. May be repeated each semester. Offered every fall and spring semester.

**MUP 341 - Jazz Band**

**(1/2)**

With membership by audition, the Jazz Band studies standard jazz literature selected and performed in concerts. May be repeated each semester. Offered every fall and spring semester.

**MUP 342 - Handbell Choir**

**(1/2)**

Handbell Choir membership (by audition). Includes instruction on ringing techniques. Local performances. May be repeated each semester. Offered every fall and spring semester.

**MUP 343 - String Quartet**

**(1/2)**

With membership by audition the String Quartet performs standard string quartet literature as well as selected chamber music. Local performances. May be repeated each semester. Offered every fall and spring semester.

**MUP 344 - Vocal Jazz**

**(1/2)**

A small vocal ensemble (membership by audition) focusing on jazz literature. May be repeated each semester. Offered every fall and spring semester.

## **Music History**

**MUH 100 - Introduction to Music (GE)**

**(2)**

Treats the development and significance of music in the Western world with emphasis on outstanding works by the world's great composers of music. Offered every fall and spring semester.

### **MUH 101 - Introduction to Listening (GE)**

**(2)**

This introductory course is required of all freshman Music majors and presents a general survey of music history, genres, styles, and media. The course focuses on analytical listening and developing aesthetic awareness. It includes an introduction to library research tools in music, and examination of the interrelationship of music studies and general education, and the integration of faith and learning with the study of music. Offered every fall semester.

Prerequisite(s): Freshman standing or consent of instructor.

### **MUH 309 - Vocal Literature I**

**(2)**

A survey of both sacred and secular solo vocal performance repertoire, with an emphasis upon art song repertoire in English and Italian. Offered fall semester of odd years.

Prerequisite(s): MUH 101 or consent of instructor.

Corequisite(s): MUA 250.

### **MUH 310 - Vocal Literature II**

**(2)**

A continued survey of solo vocal performance repertoire, with an emphasis upon art song repertoire in French and German. Offered spring semester of even years.

Prerequisite(s): MUH 101 or consent of instructor.

Corequisite(s): MUA 251.

### **MUH 311 - Piano Literature**

**(3)**

A survey of solo repertoire for the piano and its historical antecedents, principally the harpsichord and fortepiano. The course focuses upon keyboard masterworks from the Baroque period through the present. Offered spring semester of odd years.

Prerequisite(s): MUH 101 or consent of instructor.

### **MUH 312 - Instrumental Literature**

**(2)**

A survey of solo performance repertoire for the instrumentalist. The course includes representative works from all applicable periods of music, tracing changes in the instrument and in accepted playing technique as possible components of historical changes in styles and idioms of musical expression. Offered on demand.

Prerequisite(s): MUH 101 or consent of instructor.

### **MUH 331 - Music History and Literature I**

(2)

Study of Western music development, focusing on principal trends of the Medieval and Renaissance periods, approximately 500–1600 A.D.; regular listening to recorded examples, with some score analysis and individual research. Offered fall semester of odd years.

Prerequisite(s): MUT 121 and MUH 101 or consent of instructor.

### **MUH 332 - Music History and Literature II**

(2)

A continued study of Western music development, focusing on principal trends of the Baroque and Classical periods, approximately 1600–1820 A.D.; regular listening to recorded examples, with some score analysis and individual research. Offered spring semester of even years.

Prerequisite(s): MUH 101 and MUT 121 or consent of instructor.

### **MUH 333 - Music History and Literature III**

(2)

A continued study of Western music development, focusing on principal trends of the Romantic, 20th century periods, and subsequent contemporary trends, approximately 1820 to the present; regular listening to recorded examples, with some score analysis and individual research. Offered fall semester of even years.

Prerequisite(s): MUH 101 and MUT 120 or consent of instructor.

### **MUH 334 - World Music**

(2)

An introduction to listening and study of indigenous music from multiple geographic areas and cultures, including Africa, Asia, and North and South America. The course also includes a presentation of jazz as a distinctly American cultural synthesis. Offered spring semester of odd years.

Prerequisite(s): MUH 101 and MUT 120 or consent of instructor.

### **MUH 431 - Faith, Life, and Music**

(2)

A capstone course required of all Music majors. the course examines source readings concerning the integration of faith and various aspects of music. Students are challenged to evaluate the influence of the Christian faith upon their own individual music discipline. Class content also includes an overview of diverse musical professions and the ways in which faith and music intersect in the pursuit of calling. the course culminates with the writing of an essay outlining the ways in which students believe their faith shapes their lives as both disciples and musicians. Offered every spring semester.

Prerequisite(s): Senior standing or consent of instructor.

### **MUH 495 - Music History Seminar**

**(1-2)**

Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in the class schedule. Offered on demand.

## **Music Theory**

### **MUT 100 - Basic Music Theory**

**(2)**

An introduction to the fundamentals of music: key signatures, scales, intervals, notation, rhythm, meter, chords, harmony, and melodic form. Emphasis upon written skills with requirements in ear training/sight singing, improvisation and beginning composition. Offered every fall semester.

Corequisite(s): MUA 141 (may be waived by proficiency examination).

### **MUT 120 - Music Theory I**

**(4)**

Study of the notation, sound, and syntax of fundamental musical materials such as scales, intervals, and diatonic harmony. Includes laboratory experience in ear training and sight singing. Offered every spring semester.

Prerequisite(s): MUT 100 or consent of instructor.

### **MUT 121 - Music Theory II**

**(4)**

Continued study of harmonic procedures in homophonic and polyphonic settings with emphasis upon seventh chords, secondary dominants, and modulation. Includes laboratory in keyboard harmony, ear training, and sight singing. Offered every fall semester.

Prerequisite(s): MUT 120 or consent of instructor.

### **MUT 220 - Music Theory III**

**(3)**

Study of musical structures from late Renaissance polyphony to, and including, the present. Study of seventh, ninth, eleventh, Neapolitan sixth, Augmented sixth, and other altered chords. Continuation of the development of analytical tools and aural skills; ear training, sight singing, and keyboard harmony. Offered every spring semester.

Prerequisite(s): MUT 121 or consent of instructor.

### **MUT 301 - Counterpoint**

**(3)**

Analysis and composition of two, three, and four voice counterpoint as practiced in the 18th century, with special emphasis on the style of J. S. Bach. Offered fall semester of odd years.

Prerequisite(s): MUT 221.

### **MUT 302 - Analysis of Form and Texture in Music**

**(3)**

Emphasis upon the stylistic analysis of musical form and texture; study of the evolution of the standard musical forms. Offered spring semester of even years.

Prerequisite(s): MUT 221.

### **MUT 410 - Post-Tonal Theory**

**(3)**

Study of music after Debussy, focusing on analytical methods such as serialism, static diatonicism and pitch-class set theory as these apply to the music of Stravinsky, Schoenberg, Crumb, and other composers of the past century. Offered on rotation with MUT301, 302 and 432.

Prerequisite(s): MUT 220 or consent of instructor.

### **MUT 432 - Orchestration**

**(3)**

Ranges, tonal possibilities, technical limitations of standard band and orchestral instruments; analysis of standard compositions; scoring short pieces for various instrumental groups. Offered spring semester of odd years.

Prerequisite(s): MUT 220.

### **MUT 490 - Special Studies in Music Theory**

**(1-2)**

Intensive study of a selected problem, under the direction of a department faculty advisor. Offered on demand.

Prerequisite(s): Consent of department chair.

## **Nursing**

### **NSG 150 - Caring Faithfully: An Introduction to Nursing**

**(2)**

The role of the nurse is introduced within the context of Christian service and caring. Major nursing concepts include: therapeutic communication, clinical practice (i.e. California Nurse Practice Act), nursing as a vocational calling and service to others. Minimum grade of "B" required.

Prerequisite(s): Minimum grade of "C" in BIO 130 and CHE 103 and 103L.

Corequisite(s): BIO 140, NSG 250 (for transfer students).

### **NSG 246 - Transition to Nursing**

**(2)**

Transition course for advanced placement of the Licensed Vocational Nurse (LVN) into the professional nursing role. Introduction and application of scholarly writing in nursing is emphasized. Professional nursing perspectives including holistic care, historical, social, and political aspects will be explored.

Prerequisite(s): California LVN licensure and completion of national advanced placement exam(s) and acceptance into the Nursing major.

Corequisite(s): NSG 441 (2): Assessment.

### **NSG 250 - Nursing of Individuals: Adult Health I**

**(4)**

The nursing process is studied and applied. Major concepts in nursing theory are considered and illustrated in the areas of basic needs, acute, and chronic illness, rehabilitation, and the aging process. Examination of clients emphasizing skills in history taking, physical, psychological, cultural, and spiritual assessments.

Prerequisite(s): Admission to the Nursing program, and NSG 150 .

Concurrent: NSG 251. Transfer students: NSG 150 .

Corequisite(s): BIO 220 .

### **NSG 251 - Nursing of Individuals: Clinical Practicum I**

**(3)**

Includes application of nursing theory to practice in major areas of nursing in a variety of hospitals and health agencies within the San Diego community. Learning laboratory experiences are provided concomitantly to increase competency in nursing practice. Graded Credit/No Credit.

Concurrent: NSG 250.

### **NSG 260 - Nursing of Individuals: Adult Health II**

**(4)**

The nursing process is applied to adults with a variety of health care problems. Emphasis is placed on the teaching/ learning process with comprehensive application to client care.

Prerequisite(s): NSG 250 and NSG 251 and BIO 220.

Concurrent: NSG 261 and NSG 270.

Corequisite(s): FCS 225 and FCS 150 (or NSG 442).

### **NSG 261 - Nursing of Individuals: Clinical Practicum II**

**(3)**

Includes application of nursing theory to practice in major areas of nursing in a variety of hospitals and health agencies within the San Diego community. Learning laboratory experiences are provided concomitantly to increase competency in nursing practice. Graded Credit/No Credit.

Concurrent: NSG 260.

### **NSG 270 - Pharmacology in Nursing**

**(2)**

Comprehensive examination of basic theoretical foundations for drug therapy by exploring the pharmacodynamics of commonly used drugs along with the nursing implications and interventions necessary for safe therapy.

Prerequisite(s): Sophomore standing in Nursing.

Concurrent: NSG 260 or consent of instructor.

### **NSG 300 - Health Assessment**

**(1)**

Comprehensive approach to examining the client and the family, focusing on developing knowledge and skills in history taking, assessments and ability to communicate this information appropriately. Assessments include physical, psychological, cultural, and spiritual.

Concurrent: NSG 301 and consent of instructor.

### **NSG 301 - Health Assessment Clinical**

**(1)**

Application of physical, psychological, cultural, and spiritual assessments of the individual and the family. A clinical course which includes laboratory activities and independent practice. Graded Credit/No Credit.

Prerequisite(s): Advanced placement and consent of instructor.

Concurrent: NSG 300.

### **NSG 310 - Nursing of Families: Child/Adolescent Focus**

**(2)**

Focuses on nursing theory as it relates to families with children who have alterations in their health status.

Prerequisite(s): FCS 150 and Junior standing in Nursing program.

Concurrent: NSG 311.

### **NSG 311 - Nursing of Families: Child/Adolescent Clinical Practicum**

**(3)**

Consists of opportunities for application of nursing theory and child development as it relates to the child, adolescent

clients and their families. Graded Credit/No Credit.

Concurrent: NSG 310.

**NSG 330 - Nursing of Families: The Childbearing Process**

(2)

Focuses on nursing theory as it relates to families in the childbearing years.

Prerequisite(s): Junior standing in Nursing Program.

Concurrent: NSG 331.

**NSG 331 - Nursing of Families: The Childbearing Process Clinical Practicum**

(3)

Consists of opportunities for application of nursing theory as it relates to families throughout pregnancy, labor, delivery, and the postpartum period, including the care of the new born. Graded Credit/No Credit.

Concurrent: NSG 330.

**NSG 340 - Nursing of Families: Adult Health III**

(2)

Focuses on nursing theory in the care of clients who have complex health alterations and includes collaboration with their families. Advanced concepts of adult health and critical care nursing are the basis for the course.

Prerequisite(s): Junior standing in Nursing program.

Concurrent: NSG 341.

**NSG 341 - Nursing of Families: Adult Health III Clinical Practicum**

(3)

Nursing process is applied to adults experiencing multi-system failure. Emphasis is placed on assessment of individual and family needs in critical illness. Graded Credit/No Credit.

Concurrent: NSG 340.

**NSG 345 - Transition to Professional Nursing**

(3)

Transitional course for advanced placement of the Associate Degree Nurse (ADN) into the professional nursing role. Nursing concepts such as holistic care and adaptation will be emphasized along with analysis of contemporary issues and trends. Professional nursing perspectives of health care ethics, theories, historical, social, and political aspects will be explored. Examination of clients emphasizing skills in health history, physical, psychosocial, cultural, environmental, and spiritual assessment.

Prerequisite(s): California RN licensure and acceptance into the Nursing major.

### **NSG 395 - Clinical Nursing Internship**

**(1-3)**

Opportunity to gain clinical experience at a designated student nurse level in selected health care agencies, working as an employee under direct supervision of designated preceptor. Twelve to sixteen hours of experience per week. Seminars with faculty member are required. Any combination of the above levels not to exceed a total of nine units. New internships are considered for summer (between junior and senior year). A student in good standing (GPA  $\geq$  3.00) may apply for summer session only. Graded Credit/No Credit.

Prerequisite(s): Satisfactory standing in the Nursing program. A cumulative GPA of 3.000 is required for enrollment. Consent of junior team Nursing faculty.

### **NSG 399 - Nursing Research**

**(2)**

A study of activities and processes involved in investigating a selected nursing problem. Includes individual or small group work in the use of beginning level research methods. Quantitative and qualitative methods are examined.

Prerequisite(s): WRI 110 (or WRI 115 /WRI 116 or WRI 120), MTH 203 and Junior standing in Nursing program.  
Concurrent: NSG 340 and NSG 341

### **NSG 441 - Topics in Nursing**

**(1-3)**

Offers concentrations of study in selected areas of nursing practice. Topics include a theory component and may include a clinical component.

Prerequisite(s): Consent of instructor.

### **NSG 442 - Health Promotion in Adult Development**

**(2)**

Explores development of the individual from early adulthood to death. Biophysical and psychosocial issues are explored as they apply to early adulthood, middlecence and old age. Specific developmental tasks are identified in each age group. Gender role development is also explored. Ethical, social, spiritual, and moral issues are introduced as they apply to the aging process. All of these topics are discussed within the framework of professional nursing practice, and health promotion.

Prerequisite(s): Child Development (3 units of transfer credits)

### **NSG 446 - Health of Women in a Multicultural World (WS)**

**(3)**

Explores the relationship between society, culture, environment, the health of women, and the health care services of women. the approach is global or international in perspective. Participants are expected to research their own cultural heritage and describe what impact this heritage has on personal health expectations and use of health care in American Society. Offered alternative years.

### **NSG 447 - Family Violence**

**(3)**

Examines the incidence of a broad range of abuse and neglect in society. the course covers both physical and sexual abuse as well as neglect of children from birth to adolescence, date rape, spousal abuse, and abuse of elderly. This course examines causes, assessment criteria, current treatment approaches, requirement for reporting, and long-term effects on children, families, and society. Offered alternative years.

### **NSG 450 - Nursing of Communities: Mental Health Focus**

**(3)**

Focuses on the holistic understanding of the sociocultural, psychological, and situational aspects of life that impact the mental health of families and communities. Health and illness are seen from a complex, multidimensional, meaning-centered, and critical perspective with an emphasis on the promotion of mental health and wellness. Includes perspectives on group dynamics and socio-political systems as they impact mental health.

Prerequisite(s): Senior standing in Nursing program and PSY 321.

Concurrent: NSG 451, NSG 460 and NSG 461

### **NSG 451 - Nursing of Communities: Mental Health Clinical Practicum**

**(3)**

Application of a unique clinical process based upon a critical synthesis of concepts from nursing and social sciences. Emphasis is on delivering care to communities and groups with a focus on wellness and mental health promotion. Students apply theory in both inpatient and community agencies. Graded Credit/No Credit.

Concurrent: NSG 450, NSG 460 and NSG 461

### **NSG 460 - Nursing of Communities: Community Health Focus**

**(3)**

The focus is on the health of populations with emphasis on epidemiology, health promotion, health protection, disease prevention, health policy, health care delivery systems, and cultural competency. A community assessment and community teaching project is required.

Prerequisite(s): Senior standing in Nursing program and completion of SOC 360.

Concurrent: NSG 461, NSG 450 and NSG 451

### **NSG 461 - Nursing of Communities: Community Health Focus Clinical Practicum**

**(1)**

Application of the nursing process to individuals, families, and communities using the concepts studied in NSG 460 Community Health Focus. Students work with families in a variety of community based settings including a health department. Graded Credit/No Credit.

Concurrent: NSG 460.

### **NSG 470 - Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice**

**(3)**

Nursing theory as it is related to trends and issues in healthcare management including analysis and synthesis of the professional nurse role. Focus is on leadership theories and styles within multiple healthcare environments. Content includes nursing theory as it relates to leadership/management principles, career development, communication, leading change, problem solving/decision making, coordinating client care, conflict management, interdisciplinary team approaches, cultural diversity, managing personal and organizational resources, legal, ethical and political influences on transition to the professional nurse role.

Prerequisite(s): Senior standing in Nursing program.

Corequisite(s): NSG 480 and NSG 481

### **NSG 480 - Nursing Capstone**

**(1)**

Analysis and synthesis of transitional concepts, topics, and issues for students assuming a professional nursing role.

Prerequisite(s): Senior standing in Nursing program.

Corequisite(s): NSG 481 and NSG 470

### **NSG 481 - Nursing Capstone Practicum**

**(3)**

Application of nursing skills in client care settings with opportunity to provide nursing care to persons with complex health problems. Emphasis is on critical thinking, clinical decision making, and independent judgment in areas of client nursing care as well as management of nursing services. Includes collaboration with health team member and implementation of organizational skills.

Corequisite(s): NSG 480 and 470

### **NSG 490 - Special Studies in Nursing**

**(1-2)**

Concentrated study and experience in a selected area of nursing not otherwise available to nursing majors in the program. The student prepares, in consultation with the course coordinator, an appropriate design for the study, taking into consideration interest, relevancy to nursing, and availability of resources. May be repeated to a total of six units.

Prerequisite(s): NSG 260, NSG 261 and NSG 270, GPA of 3.000 in Nursing, and consent of instructor.

### **NSG 491 - Directed Clinical Studies in Nursing**

**(1-3)**

Concentrated clinical experience in a selected area of nursing not otherwise available. The student prepares, in consultation with the course coordinator, an appropriate design for the study, taking into consideration interest, relevancy to nursing, and availability of resources. May be repeated to a total of six units. Graded Credit/No Credit.

Prerequisite(s): Senior standing in Nursing program and consent of instructor. A cumulative GPA of 3.000 is required for enrollment.

### **NSG 495 - Internship in Clinical Nursing**

**(1-3)**

See NSG 395 for description.

Prerequisite(s): Senior standing in Nursing program. Consent of junior or senior team Nursing faculty. A cumulative GPA of 3.000 is required for enrollment. Application must be made by March 15 for summer and fall registration, and by October 15 for spring registration.

## **Off-Campus Program**

### **OCP 000 - Off-Campus Program**

**(12-17)**

Students taking courses through a cooperative agreement with another credit granting institution register for this course.

### **OCP 210 - Latin American Studies Program**

**(6)**

Located in San Jose, Costa Rica, the program gives students the opportunity to study the language, culture, politics, history, economics, ecology, and religion of the region while living with a Costa Rican family. Students also participate in a service opportunity and travel for two weeks to surrounding countries. Three specialized academic concentrations, International Business and Management, Tropical Sciences and Sustainability, and Language/Literature are available to qualified students. [CCCU]

### **OCP 220 - Middle East Studies Program**

**(6)**

The Middle East Studies Program (MESP) in Cairo, Egypt provides students with the opportunity to study Middle Eastern cultures, religions, and conflicts from within this diverse and strategic region. Juniors and seniors participate in interdisciplinary seminar classes, receive Arabic language instruction and serve as interns with various organizations in Cairo. The MESP encourages and equips students to relate to the Muslim world in an informed and constructive manner. [CCCU]

### **OCP 230 - Russian Studies Program**

**(6)**

The Russian Studies Program enables juniors and seniors from Christian colleges to spend a semester living and learning in Russia. Students study the Russian language and attend seminar courses on Russian culture, history and current political and economic issues. Program participants experience a variety of Russian environments, living for twelve weeks in Nizhni Novgorod and visiting both Moscow and St. Petersburg. The semester includes the opportunity to participate in a service project and to live with Russian families for a portion of their stay. [CCCU]

### **OCP 245 - China Studies Program**

**(6)**

The China Studies Program is interdisciplinary and has been designed primarily for juniors and seniors. Participants are able to view China from the inside and to experience its culture and its diversities. Courses include: Basic Conversational Chinese, Chinese History and Culture, Contemporary Chinese Society, Economic Development and Reform Policies, and Politics and Foreign Affairs of China. [CCCU]

### **OCP 290 - Institute for Family Studies**

**(1-8)**

The Institute for Family Studies is offered through Focus on the Family. It is a 15-week program (up to 16 semester units of credit) offered in Colorado Springs, Colorado, for students wishing to study the pressing issues facing the family from a Christian world-view perspective.

### **OCP 299 - Special Off-Campus Studies**

**(1-16)**

Studying at the lower-division level in an approved program at an off-campus setting. All such programs must have the endorsement of the Academic Policies Committee.

### **OCP 300 - Au Sable Environmental Field Studies Program**

**(4-8)**

Biology majors and other interested students may take advantage of unique, environmentally-oriented field courses offered through the Au Sable Institute of Environmental Studies, a Christian organization offering course work and field experiences in the context of Christian environmental stewardship. Courses are offered during two 5-week sessions in the summer at three North American campuses (Great Lakes, Pacific Rim, Florida) and two international venues (India, Kenya). Courses offered include field botany, animal ecology, mammalogy, ornithology, marine biology, conservation ecology, and ecology of various ecosystems (forest, fresh water, alpine, tropical).

### **OCP 305 - American Studies Program**

**(1-16)**

Students spend a semester in Washington, D.C., earning academic credit by serving as interns and participating in a contemporary, issue-oriented seminar program. Internships are available in congressional offices, social service agencies, think tanks, cultural institutions and many other organizations. the program is designed for juniors and seniors with a wide range of academic majors and vocational interests. [CCCU]

### **OCP 310 - Latin American Studies Program**

**(10)**

See OCP 210 for description.

### **OCP 315 - Los Angeles Film Studies Center**

**(1-16)**

This program enables students to serve in various aspects of the film industry with professional skill and Christian integrity. Located in Burbank, California, near major production studios, the semester-long program combines seminar course work with internships in various segments of the film industry, providing the opportunity to explore the industry within a Christian context and from a liberal arts perspective. [CCCU]

**OCP 320 - Middle East Studies Program**

**(10)**

See OCP 220 for description.

**OCP 330 - Russian Studies Program**

**(10)**

See OCP 230 for description.

**OCP 335 - Oxford Honors Program**

**(12-16)**

Students spend a semester in England studying in a rigorous academic program, aimed at increasing critical thinking skills and scholarship from an integrated Christian perspective. Participants choose from a wide variety of tutorial study programs in numerous disciplines, including the arts, religion, history, literature, and philosophy. In addition to two Oxford tutorials, students participate in a seminar and an integrative course through which they produce a scholarly project or term paper. Field trips provide opportunities for experiential learning in England's rich historical setting. [CCCU]

**OCP 340 - Uganda Studies Program**

**(1-16)**

The Uganda Studies Program (USP) is designed to integrate the study of culture, history, religion, politics and humanities into a blended classroom and experiential survey of Ugandan life. It is comprised of an experiential course (designed especially for USP students), two of three African core courses and electives. All of the courses are taught and housed at Uganda Christian University. [CCCU]

**OCP 345 - China Studies Program**

**(10)**

See OCP 245 for description.

**OCP 350 - Washington Semester Program**

**(1-16)**

This American University program provides course work and internship opportunities in national politics, foreign policy, economic policy and justice, and a number of other fields. Students live and study on the campus of the American University.

### **OCP 355 - Washington Journalism Center**

**(1-16)**

The Washington Journalism Center is an advanced experiential semester on Capitol Hill that will cultivate professional news skills and encourage students to think through the implications of being a Christian working in the news media in a city that is home to the powerful and the powerless. [CCCU]

### **OCP 360 - Sacramento Semester Program**

**(1-12)**

This program is housed at California State University, Sacramento. It provides course work and internship opportunities for students interested in state politics.

### **OCP 370 - United Nations Semester**

**(1-16)**

The United Nations Semester is offered through Drew University. Participating students attend official meetings, seminars and do research at the United Nations while taking international organization classes at Drew.

### **OCP 380 - World Capitals Program**

**(1-16)**

This American University program provides course work and internship opportunities at several national capitals around the world. These study-abroad programs allow students to study languages, government policies and cultures of the host nation.

### **OCP 385 - PLNU and INSTEP Cambridge Summer Study Abroad Program**

**(6)**

PLNU and the Institute of Economic and Political Studies (INSTEP) offer a summer study-abroad program in Cambridge, England. Students spend six weeks concentrating on coursework designed for those with interests in international relations, political economy, economics and international business. Students choose two three-unit courses from five offerings, all taught by senior INSTEP academics.

### **OCP 390 - Institute for Family Studies**

**(1-12)**

See OCP 290 for description.

### **OCP 399 - Special Off-Campus Studies**

**(1-16)**

Study at the upper-division level in an approved program at an off-campus setting. All such programs must have the endorsement of the Academic Policies Committee.

## **OCP 400 - Au Sable Environmental Field Studies Program**

**(4-8)**

Biology majors and other interested students may take advantage of unique, environmentally-oriented field courses offered through the Au Sable Institute of Environmental Studies, a Christian organization offering course work and field experiences in the context of Christian environmental stewardship. Courses are offered during two 5-week sessions in the summer at three North American campuses (Great Lakes, Pacific Rim, Florida) and two international venues (India, Kenya). Courses offered include field botany, animal ecology, mammalogy, ornithology, marine biology, conservation ecology, and ecology of various ecosystems (forest, fresh water, alpine, tropical).

## **Philosophy**

### **PHL 201 - Introduction to Philosophy (GE)**

**(3)**

A historical survey of selected philosophical ideas, systems, and methods, especially as these have developed in Western civilization.

### **PHL 211 - Ethics (GE)**

**(3)**

The study of right and wrong in principle, character, and conduct; practical moral issues analyzed from the basis of sound moral theory; characteristics of an adequate, consistent code of ethics.

### **PHL 250 - God and Philosophy**

**(3)**

This course provides an exploration of issues related to theological discourse, especially language about God. The class engages significant figures and ideas throughout the Western philosophical tradition. There will be a focus on Medieval Christian philosophers including St. Augustine, St. Anselm, and St. Aquinas. There will also be a focus on justice issues related to gender, racial, and economic circumstances. Offered annually.

Prerequisite(s): PHL 201 or PHL 211 .

### **PHL 277 - Logic**

**(3)**

A study of the logical appraisal of arguments with attention given to formal and informal fallacies.

### **PHL 301 - Plato and Aristotle**

**(3)**

This course is designed to examine developments in Western philosophy with an emphasis on ancient Greek

philosophers utilizing readings from significant and representative texts of the historical eras. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211 .

### **PHL 302 - Descartes through Hegel**

**(3)**

This course examines developments in Western philosophy with an emphasis on modern philosophy from Descartes through Hegel utilizing readings from significant and representative texts of the modern historical period. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211.

### **PHL 321 - Justice, Politics, and the Social World**

**(3)**

This course traces the emergence and development of political and social philosophy, with special consideration given to Plato's notion of justice, Social Contract Theory, Marxism, racial justice, feminism and poststructuralism. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211 .

Also offered as SOC 321.

### **PHL 331 - Existential Philosophy and Literature**

**(3)**

A philosophical and historical examination of themes within existentialist literature and philosophy. This course includes such figures as Kierkegaard, Heidegger, Sartre, de Beauvoir, Dostoevsky, and Camus. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211 .

### **PHL 341 - Philosophy and Art**

**(3)**

Classical and recent theories of beauty, the sublime, and art, with selected coverage of such concepts as aesthetics, expression, mimesis, criticism and the relationship between art, the art-world, and society. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211 .

### **PHL 360 - Philosophy and the Sciences**

**(3)**

A philosophical and historical examination of the nature and epistemological foundations of science, the scientific method, and the relationship between science and such areas as religion, morality, and culture. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211.

**PHL 371 - Education and the Ethical Life**

**(3)**

An examination of significant works in the philosophical tradition from ancient Greek to contemporary texts that deal explicitly with the topics of education and pedagogy. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211.

**PHL 380 - Alienation, Transformation, and Reconciliation in Film**

**(3)**

A philosophical exploration of the themes of alienation, transformation, and reconciliation through the interpretation of film. Possible foci include apocalyptic, post-apocalyptic, and dystopic genres. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211.

**PHL 381 - Ethics, Responsibility, and Love**

**(3)**

This course examines the ethical implications of love. The course includes such figures as Plato, St. Augustine, Kierkegaard, Buber, Levinas, and Irigaray. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211.

**PHL 401 - Contemporary Voices in Philosophy, Theology, and Ethics**

**(3)**

This course will study 20th century Western philosophy and critically reflect upon those trajectories of thought that arise out of and respond to the philosophical work of the Western philosophical tradition as a whole. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211 .

**PHL 411 - The Search for Meaning: Goodness, Being, and Truth**

**(3)**

An examination of the nature of reality, meaning, and knowledge, and what constitutes each. Possible topics include realism, nominalism, freedom and responsibility, God, space, time, causation, skepticism, belief, truth, and justification. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211.

**PHL 490 - Special Studies in Philosophy**

**(1-3)**

An investigation of a topic in philosophy not otherwise covered in the curriculum. May be repeated to a total of six

units.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

## **Physical Education**

### **PED 100 - Fitness Through Movement (GE)**

**(2)**

Development of personal fitness through assessment, theory, and practice; introduces principles of conditioning, nutrition, and stress management leading to a lifetime of fitness and desirable health attitudes and practices.

### **PED 102 - Selected Activities in Physical Education (GE)**

**(1)**

Development of fundamental skills through participation in selected activities. (Activity not offered in other courses; to be announced in the schedule.) May be repeated up to a total of 2 units. May have a special fee.

### **PED 110 - Martial Arts and Self Defense (GE)**

**(1)**

An introductory course for the general student covering mixed martial arts (karate/tae kwon do, jujitsu/aikido) and self defense.

### **PED 112 - Yoga Sculpt (GE)**

**(1)**

Development of personal fitness through a variety of activities including yoga, pilates, core stability ball, light weights, resistance bands, and mat work.

### **PED 114 - Cheerleading (GE)**

**(1)**

Prerequisite(s): *Consent of instructor required.*

### **PED 115 - Adapted Physical Activity (GE)**

**(1)**

Individually-tailored exercise program for those students physically unable to enroll in the regular physical activity courses. Introduces concepts of physical fitness, basic physiology, nutrition, and proper body mechanics. May be repeated up to a total of 2 units.

Prerequisite(s): Physician's referral and with the approval of the department chair.

**PED 120 - Beginning Tennis (GE)**

**(1)**

Fundamental techniques, rules, court play, and etiquette.

**PED 121 - Advanced Tennis (GE)**

**(1)**

Development of the advanced skills of the approach shot, net play, varied serves, and spins. Participation in singles and doubles strategies and competition.

Prerequisite(s): Consent of instructor.

**PED 130 - Beginning Volleyball (GE)**

**(1)**

An introduction to the fundamental skills for effective play and an understanding of the rules of the game.

**PED 131 - Advanced Volleyball (GE)**

**(1)**

Review of fundamental skills required for highly competitive play with the addition of advanced strategies and technique.

Prerequisite(s): PED 130 or consent of instructor.

**PED 135 - Badminton (GE)**

**(1)**

An introduction to the basic techniques, strategies, and rules for singles and doubles play.

**PED 140 - Beginning Swimming (GE)**

**(1)**

Fundamental swim strokes, skills, and safety techniques geared toward developing fitness. Special fee.

**PED 141 - Advanced Swimming (GE)**

**(1)**

Training techniques in competitive swimming. Starts, turns, conditioning, stroke mechanics. Special fee.

Prerequisite(s): PED 140 or consent of instructor.

**PED 144 - Beginning Surfing (GE)**

**(1)**

Instruction and participation in the basic skills of surfing and rough water safety. Offered on a Quad basis.

**PED 148 - Aerobics (GE)**

**(1)**

Sustained, creative calisthenics, and exercises performed to musical accompaniment.

**PED 150 - Bowling (GE)**

**(1)**

An introduction to basic skill techniques, rules, safety, etiquette, and competitive league experience. Special fee.

**PED 155 - Weight Training (GE)**

**(1)**

Development of skills and knowledge pertaining to building strength, endurance, and flexibility through the use of weights.

**PED 160 - Golf (GE)**

**(1)**

An introduction to basic skill techniques, rules, safety, and etiquette leading to a practical golf course experience. Special fee.

**PED 168 - Outdoor Adventures (GE)**

**(1)**

Instruction in the necessary skills and use of proper equipment for safe, enjoyable wilderness outings. Concepts of survival, route-finding, leadership and trip planning for backpacking, rock climbing, and whitewater rafting are part of the student's experience. Offered on a Quad basis. Special fee for transportation and food.

**PED 170 - Varsity Basketball: Men (GE)**

**(1)**

**PED 171 - Varsity Basketball: Women (GE)**

**(1)**

**PED 172 - Varsity Tennis: Men (GE)**

**(1)**

**PED 173 - Varsity Tennis: Women (GE)**

(1)

**PED 175 - Varsity Track and Field: Women (GE)**

(1)

**PED 176 - Varsity Golf (GE)**

(1)

**PED 177 - Varsity Baseball (GE)**

(1)

**PED 178 - Varsity Softball (GE)**

(1)

**PED 180 - Varsity Soccer: Men (GE)**

(1)

**PED 181 - Varsity Volleyball (GE)**

(1)

**PED 183 - Varsity Cross Country: Women (GE)**

(1)

**PED 184 - Varsity Soccer: Women (GE)**

(1)

**PED 200 - Optimal Health (GE)**

(2)

Students are encouraged to take charge of their own lives in terms of attitude, exercise, and nutrition-fostering new habits in these areas and developing an understanding of health as more than the absence of disease.

**PED 220 - Team Sports Fundamentals and Strategies (GE)**

(2)

Development and practical application of skills, play, and strategy of team sports from a participation and coaching perspective. Content includes baseball/softball, basketball, football, soccer, and volleyball. In addition to play, students will develop and manage an athletic team, including tactical and technical instruction, game management, and understanding game officiating.

### **PED 225 - Individual and Dual Sports (GE)**

**(2)**

An introduction to the knowledge, skills, and progressions involved in teaching and participating in functional fitness activities. Emphasis will be placed on teaching and assessing movement progressions involved with individual and dual sports.

### **PED 308 - Methods of Teaching Physical Education**

**(3)**

Development of competencies in teaching motor skills, social skills, and fitness through games, sports, and movement experiences. Organization of teaching units, classroom management, and selection of methods and materials for preschool and elementary grades. Includes outside observation hours.

Prerequisite(s): PED 100 or PED 200 or FCS 315.

### **PED 350 - Foundations and Techniques of Coaching**

**(4)**

An overview of coaching aspects including psychology of coaching, administrative coaching skills, and technical strategies of team sports. Includes sport-specific training in: basketball, softball/baseball, and volleyball.

Prerequisite(s): PED 220 or consent of instructor.

### **PED 484 - Practicum in Coaching**

**(1-3)**

An on-campus experience involving observation and/or active coaching experiences under the direction of a PLNU athletic coach. May be repeated for a maximum of six units.

Prerequisite(s): PED 350 or consent of instructor.

### **PED 488 - Internship in Coaching**

**(1-3)**

An off-campus experience involving observation and/or active coaching with a local athletic team or fitness center. May be repeated for a maximum of six units.

Prerequisite(s): PED 350 or consent of instructor.

## **Physical Science**

### **PSC 105 - The Cosmos (GE)**

**(4)**

An introduction to our place in the universe emphasizing religious, cultural and historic perspectives including modern

developments in physics and astronomy. (Meets a general education requirement; does not count toward any Chemistry or Physics majors.)

Prerequisite(s): MTH 099 or equivalent.

### **PSC 111 - Physical Science for Teachers (GE)**

**(4)**

An introductory survey of selected principles in physics and chemistry with a discussion of related societal and environmental issues. This course focuses on topics necessary for the California multiple subject teaching credential (K-8). This class is highly interactive and will make use of many hands on activities. Meets a general education requirement; does not count toward the Chemistry or Physics major.

Pre or Corequisite: MTH 113 or equivalent.

### **PSC 112 - Earth and Space Science for Teachers**

**(3)**

An introductory survey of the disciplines of geology, oceanography, meteorology, and astronomy with discussion of philosophical and societal issues. This course focuses on topics necessary for the California multiple subject teaching credential (K-8).

Prerequisite(s): PSC 111

## **Physics**

### **PHY 113 - The Physics of Sound and Music (GE)**

**(3)**

An introduction to the science of sound, hearing and music. The course will focus on concepts of sound production, propagation, and perception including topics such as musical scales, instruments, and acoustics.

Pre or Corequisite: MTH 099 or equivalent

Corequisite(s): PHY 113L

### **PHY 113L - Physics of Sound and Music Lab (GE)**

**(1)**

A lab course designed for a hands-on exploration of the physics of sound.

Corequisite(s): PHY 113

### **PHY 141 - General Physics I (GE)**

**(4)**

A general introduction to physics including mechanics, thermodynamics, waves and sound. The course is taught primarily at the algebra/trigonometry level but does require limited use of calculus. Meets the professional requirements of life and medical science majors. Lecture and laboratory. Not repeatable. Letter grading.

Corequisite(s): MTH 133 or consent of instructor.

### **PHY 142 - General Physics II (GE)**

**(4)**

A general introduction to physics including electricity and magnetism, optics, and modern physics. The course is taught primarily at the algebra/trigonometry level but does require limited use of calculus. Meets the professional requirements of life and medical science majors. Lecture and laboratory. Not repeatable. Letter grading.

Prerequisite(s): PHY 141 or consent of instructor.

### **PHY 241 - University Physics I (GE)**

**(4)**

An analytic, calculus-based study of classical physics appropriate for science and engineering majors. Includes mechanics, waves, and thermodynamics. Lecture and laboratory. Not repeatable. Offered in the spring. Letter grading.

Corequisite(s): MTH 144 or MTH 164 or consent of instructor.

### **PHY 242 - University Physics II**

**(4)**

An analytic, calculus-based study of classical physics appropriate for science and engineering majors with an emphasis on electromagnetism, circuits, and optics. Lecture and laboratory. Not repeatable. Offered in the fall. Letter grade.

Prerequisite(s): PHY 241

Corequisite(s): MTH 144 or MTH 164 or consent of instructor.

### **PHY 304 - Modern Physics**

**(4)**

An introduction to concepts of modern physics including relativity, quantum theory, atomic physics, and high energy physics. Lecture and laboratory.

Prerequisite(s): PHY 142 or PHY 242.

### **PHY 311 - Nuclear Physics**

**(3)**

A survey of nuclear physics including nuclear models, laws of radioactive decay, radiation detection, and applications of nuclear science in engineering and medicine. Lecture and laboratory. Not repeatable. Letter grade.

Prerequisite(s): PHY 142 or PHY 242

**PHY 341 - Analytical Mechanics**

**(4)**

Newtonian mechanics, dynamics of particles and rigid bodies, oscillatory motion, central forces, inertial tensors, Lagrangian and Hamiltonian formulations.

Prerequisite(s): PHY 242 and MTH 274

Recommended: MTH 333

**PHY 361 - Electricity, Magnetism, and Waves I**

**(3)**

Classical electromagnetism including topics in electrostatics, magnetostatics, fields in matter, electromagnetic induction, and Maxwell's equations.

Prerequisite(s): PHY 242 and MTH 274.

Recommended: MTH 333 - Differential Equations

**PHY 362 - Electricity, Magnetism, and Waves II**

**(3)**

Electrodynamics with an emphasis on application of Maxwell's equations particularly to electromagnetic radiation.

Prerequisite(s): PHY 361

**PHY 401 - Thermodynamics**

**(3)**

Fundamental concepts of thermodynamics and statistical mechanics; applications to both classical and quantum systems.

Prerequisite(s): PHY 242.

Recommended: MTH 333

**PHY 431 - Quantum Mechanics**

**(3)**

A rigorous introduction to quantum physics including Schrodinger's equation, matrix mechanics, perturbation theory, and applications in atomic and molecular physics.

Prerequisite(s): PHY 304 and MTH 274.

Recommended: MTH 333

**PHY 443 - Solid State Physics**

**(3)**

An introduction to the study of solids, including crystal structure, reciprocal lattices, crystal binding, phonons, and electron band theory.

Prerequisite(s): PHY 431.

**PHY 475 - Senior Laboratory and Student Project**

**(2)**

This course provides students the opportunity to prepare a technical paper on scientific or engineering research and to make an oral presentation of their results of this research. Initially topics investigated will draw on learning from the core curriculum, including topics in an advanced laboratory setting in mechanics, quantum mechanics, statistical mechanics, and electricity and magnetism. Students will then develop and explore a project of their choosing. This course will normally be completed in a student's senior year.

**PHY 489 - Internship in Physics**

**(1-4)**

Designed to provide experience in applied settings for students majoring in physics. an academic plan must be developed in consultation between the supervising faculty member, student and work supervisor. Students must complete 45 hours of supervised work for each unit of credit received. Students may repeat this course for up to four units.

**PHY 490 - Special Topics in Physics**

**(1-3)**

The topics in physics chosen depend on regular or visiting faculty expertise as well as student demand. May be repeated as topics vary up to a total of six units.

Prerequisite(s): Consent of instructor.

**PHY 495 - Seminar in Physics**

**(1)**

Presentation of papers by students, faculty, and visiting scholars, as well as attendance at seminars at other institutions. May be repeated up to a maximum of four units. Graded Credit/No Credit.

**PHY 499 - Research in Physics**

**(1-4)**

Independent investigation, under the supervision of a faculty member, of a specific problem in physics or engineering.

Prerequisite(s): Consent of instructor and Senior standing.

**Political Science**

**POL 101 - Introduction to Political Science (GE)**

**(3)**

A survey of the major dynamics within the political world. The course focuses on political behavior, structures of government, the people and processes of politics, and the challenges currently facing countries around the world. In this course, we will explore a variety of contemporary issues, including inequality, poverty, nationalism, democratization, political violence, and development.

**POL 165 - American Government**

**(4)**

A study of American political ideas, governmental institutions, and political processes at the national, state, and local levels. The study also describes and evaluates the major policy commitments of the national government. Meets the United States Constitution requirement to obtain a California teaching credential.

**POL 190 - The Politics of Race, Class, and Gender (GE/WS)**

**(4)**

An introduction to politics, using an interdisciplinary approach to contemporary controversies surrounding issues of ethnicity, socioeconomic class, and gender. The course includes historical, legal, and political perspectives. Offered fall semester.

**POL 230 - Introduction to International Relations**

**(4)**

An investigation of the structures of international relations with reference to conflict and cooperation. Topics include the national interest, alliances, the causes of war, conflict resolution, diplomacy, and international law.

**POL 270 - Scope and Methods of Political Science**

**(4)**

An examination of the scope of the discipline of political science and the research methods used in the study of political phenomena.

**POL 290 - World Regional Geography**

**(3)**

A survey of the six major geographical regions of the world, and the interaction between the geological and geographical environments and the social and cultural structures of the peoples of those regions.

**POL 301 - Transitions to Democracy**

**(4)**

This course explores the democratization process from start to finish, including all phases from cracks in the authoritarian regime to consolidation and issues of transitional justice. The course also deconstructs the process in stages so as to provide an overview of conditions that might help or hinder the process. Particular attention is given to "third wave" transitions (1974-1991), such as Portugal, Chile, Argentina, Germany, and the former Soviet Union. Current-day examples of transitions to and away from democracy are included as well.

**POL 320 - U.S. Constitution and Civil Liberties Law**

(4)

A survey of the basic tenets of constitutional law with an emphasis on civil liberties embodied in the Bill of Rights and major Supreme Court decisions.

**POL 321 - Western Political Thought**

(4)

Study of canonical texts by important political thinkers throughout the history of Western civilization, such as Plato, Aristotle, Hobbes, Locke, Marx, and Foucault. Issues of enduring interest to political philosophers, such as freedom, justice, and authority are discussed.

**POL 325 - American Political Thought**

(4)

Foundations of democratic theory and the development of political thought in the American experience, from its Enlightenment roots to post-modern challenges.

**POL 330 - The Development of Feminist Thought (WS)**

(4)

A survey of the development of various strands of feminist thought and engagement in current conversations within and about feminism. Offered spring 2014.

**POL 341 - Campaigns and Elections in an Electronic Age**

(4)

This course analyzes the American electoral process with regard to the history of the political party system, recent trends in partisanship and vote choice, basic techniques of political advertising, and the role of television news, the Internet, and other electronic media in campaigns.

**POL 351 - War and Peace Studies**

(4)

The first part of this course explores traditional theories and modern scientific studies of war. The course then moves to an analysis of the Vienna and Versailles peace conferences, alternative peace paradigms, and then methods of peace research and avenues of policy action.

**POL 360 - Urban Politics**

(4)

The course introduces students to urban politics in a discussion of the history of American cities, primarily through the lens of race and class. The course also includes the most significant political and policy problems affecting American urban areas, including violence, education, housing, and employment.

**POL 370 - Comparative Politics**

(4)

An introduction to the political processes and institutions within countries, with a focus on comparing these across regions. Topics include political socialization, political participation, policymaking, and the way in which policy decisions end up affecting society. These issues will be explored in two ways: comparisons across countries and an in-depth country analysis of eight specific countries.

**POL 380 - Congress and the Presidency**

(4)

A study of the legislative and executive branches of American government. Topics include the structure and functions of the United States Congress and the presidency, relations between the branches, and the role of interest groups in influencing legislators and executives.

**POL 390 - American Capitals Program**

(9)

This three-course sequence of classes in political issues and governmental processes is taken in either Sacramento, California, or Washington, D.C. the sequence is taken in conjunction with POL 460 and together the courses provide students with politically contextualized study and experience in government. Available only through the Sacramento Semester Program in Sacramento, or the American Studies or Washington Semester Program in Washington, D.C.

**POL 391 - World Capitals Program**

(3-12)

This sequence of classes in political issues and governmental processes is taken in the national capital of another country. The sequence is taken in conjunction with POL 460 and together they provide students interested in world or comparative politics the opportunity for politically contextualized study and experience.

**POL 415 - Women and Politics (WS)**

(4)

An examination of women's role in political life. the content includes analysis of gender as a legitimate category of political inquiry, gender-based social movements, women's political participation, and the impact of political systems and public policy on women. Offered fall semester 2013.

**POL 420 - United States Foreign Policy**

(4)

A study of the policy-making process, including the roles of public opinion and the president, the United States Congress, and the bureaucracy. The course also investigates the challenges and opportunities facing the United States in the new post-Cold War world of economic competition.

**POL 435 - Global Governance**

(4)

This course reviews and evaluates the evolving mechanisms for global order and justice. Primary attention is given to the United Nations system, international law, and the expansion of international regimes.

**POL 437 - International Economics**

(4)

This course presents theories and models of international trade and money, and government policy and macroeconomic stabilization, with a focus on global economic issues and applied economic topics. The economics of global cities, urban problems, poverty, labor, immigration, utilization of resources, environmental stewardship, globalization, gender, crime, and violence will be discussed.

Prerequisite(s): ECO 101 and ECO 102 or consent of instructor.

Also offered as ECO 410 .

**POL 438 - International Law**

(4)

This course introduces advanced undergraduate students to the development and content of international law, in particular its role in the current practice of international relations. Topics include laws of war, use of force, minority rights, environmental law, and the future of international law.

Prerequisite(s): POL 435 or consent of instructor.

**POL 441 - Issues in Public Policy**

(4)

A study of the policymaking process in the United States, illustrated by an in-depth study of three contemporary public policy issues. We will discuss theories and policies, as well as critiques of them, in terms of equality, democracy, and citizenship. Students will then become a "policymaker" and a "policy analyst."

**POL 442 - Contemporary Issues in World Politics**

(4)

An in-depth study of selected issues in contemporary world politics, such as arms control issues, environmental issues, convergence issues, and virtual diplomacy.

**POL 444 - Contemporary Political Ideologies**

(4)

This course examines political ideologies that shape beliefs, values, and actions of political movements and regimes. Topics include totalitarianism, authoritarianism, socialism, and democracy. Includes an in-depth study of democratic theory and practice globally.

**POL 450 - Issues of Global Human Rights**

(2)

This course reviews the causes of such gross violations of human rights as genocide, torture, and "ethnic cleansing," the corpus of international human rights law, and emerging areas of human rights concern.

**POL 455 - Protest and Social Movements in World Politics**

(4)

This course looks at the theories and concepts behind studies of social movements and seeks to answer such questions as "Why do they happen?" and "Are they effective?" In addition to theory, the course utilizes case studies of particular social movements in world politics, such as urban protests, civil rights movements, environmental causes, democratization efforts, religious movements, and gender-related movements.

**POL 460 - Internship in Political Science**

(2-4)

A learning experience in a work environment at a selected governmental or public advocacy site. Students are under the supervision of an on-site supervisor and an academic advisor. Repeatable for up to 4 units.

Prerequisite(s): Consent of instructor.

**POL 490 - Special Studies in Political Science**

(1-4)

An individualized study of a topic applying the special skills of a political scientist. The project must be approved and supervised by an academic advisor. May be repeated up to a total of eight units.

Prerequisite(s): Consent of instructor.

**Private Instruction**

**MUA 101 - Recital Attendance - 4 semesters**

(0)

All Music majors are required to attend 12 department-sponsored or approved concerts/recitals each semester. Credit/No-Credit. Offered every fall and spring semester.

**MUA 131 - Class Voice**

**(1)**

Class instruction in singing for the student without prior study; development of specific vocal and musical abilities; selected and graded songs suited to vocal goals. Offered every fall and spring semester. Class voice can be repeated.

**MUA 132 - Class Voice II**

**(1)**

Class instruction in singing for the student without prior study; development of specific vocal and musical abilities; selected and graded songs suited to vocal goals. Offered every spring semester.

**MUA 141 - Class Piano I**

**(1)**

Class instruction for the student without prior study; emphasizes functional keyboard skills such as sight reading, harmonization, improvisation, and solo and ensemble playing. Appropriate for Music majors who must prepare for the proficiency exam. Offered every fall and spring semester.

**MUA 142 - Class Piano II**

**(1)**

Class instruction for the student without prior study; emphasizes functional keyboard skills such as sight reading, harmonization, improvisation, and solo and ensemble playing. Appropriate for Music majors who must prepare for the proficiency exam. Offered every fall and spring semester.

**MUA 143 - Piano Proficiency Skills**

**(1)**

Class instruction in piano. Emphasizes harmonization, hymn and open score reading, solo and congregational style hymn playing and rudimentary melodic improvisation. Appropriate for Music majors preparing for piano proficiency examination. May be repeated up to a total of 2 units. Offered every fall and spring semester.

Prerequisite(s): MUA 142 or consent of instructor.

**MUA 151 - Class Guitar I**

**(1)**

Class instruction for the student without prior study; integrates rudiments of music theory with basic performance skills; ensemble and solo playing. May be repeated up to a total of 2 units. Offered every fall and spring semester.

**MUA 152 - Class Guitar II**

**(1)**

Class instruction for the student without prior study; integrates rudiments of music theory with basic performance skills; ensemble and solo playing. May be repeated up to a total of 2 units. Offered every fall and spring semester.

### **MUA 155 - Private Voice**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 156 - Private Piano**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 157 - Private Organ**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 158 - Private Harpsichord**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 159 - Private Violin**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 160 - Private Viola**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be

achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 161 - Private Violoncello**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 162 - Private String Bass**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 163 - Private Guitar**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 164 - Private Harp**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 165 - Private Flute**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 166 - Private Oboe**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 167 - Private Clarinet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 168 - Private Saxophone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 169 - Private Bassoon**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 170 - Private Trumpet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 171 - Private Trombone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 172 - Private French Horn**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 173 - Private Euphonium**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 174 - Private Tuba**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 175 - Private Percussion**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 201 - Piano Proficiency Exam**

**(0)**

All Music majors are required to pass a proficiency examination in piano skills, preferably by the end of the sophomore year. It must be completed prior to graduation. A complete description of the exam contents is listed in the current edition of the Music Student Handbook, available upon request in the department office. Offered every fall and spring semester. Credit/No-Credit.

**MUA 212 - Beginning Conducting**

**(2)**

Introduction to basic conducting techniques, such as score reading, metric patterns, cues and cutoffs. Offered every spring semester.

**MUA 250 - Diction for Singers I**

**(1)**

An intensive study of English, Italian, German, and French diction as it applies to singers, utilizing the International Phonetic Alphabet to transfer foreign texts to vocalized symbols. Offered fall semester of even years.

**MUA 251 - Diction for Singers II**

**(1)**

An intensive study of English, Italian, German, and French diction as it applies to singers, utilizing the International Phonetic Alphabet to transfer foreign texts to vocalized symbols. Offered spring semester of odd years.

**MUA 255 - Private Voice**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 256 - Private Piano**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 257 - Private Organ**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 258 - Private Harpsichord**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 259 - Private Violin**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 260 - Private Viola**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 261 - Private Violoncello**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 262 - Private String Bass**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 263 - Private Guitar**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 264 - Private Harp**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 265 - Private Flute**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 266 - Private Oboe**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 267 - Private Clarinet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 268 - Private Saxophone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 269 - Private Bassoon**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 270 - Private Trumpet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 271 - Private Trombone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 272 - Private French Horn**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 273 - Private Euphonium**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 274 - Private Tuba**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 275 - Private Percussion**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 312 - Choral Conducting and Literature**

**(2)**

Application of conducting principles and techniques to choral music. Includes an overview of choral literature. Offered fall semester of odd years.

Prerequisite(s): MUT 121.

Corequisite(s): MUE 303 (Music Education majors).

### **MUA 313 - Instrumental Conducting**

**(2)**

Application of conducting principles and techniques to instrumental music, especially music for orchestra and concert band. Offered fall semester of even years.

Prerequisite(s): MUT 121.

### **MUA 331 - Acting for Singers**

**(1)**

Open to advanced voice students by audition. Scenes from operas and/or musical theatre are performed with staging and costumes. May be repeated up to a total of 2 units. Offered spring semester of even years.

### **MUA 332 - Musical Theatre Production**

**(1-2)**

Performance experience in musical theatre, open to all students by audition. Offered spring semester of odd years.

### **MUA 355 - Private Voice**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 356 - Private Piano**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 357 - Private Organ**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 358 - Private Harpsichord**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 359 - Private Violin**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 360 - Private Viola**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 361 - Private Violoncello**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 362 - Private String Bass**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 363 - Private Guitar**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be

achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 364 - Private Harp**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 365 - Private Flute**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 366 - Private Oboe**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 367 - Private Clarinet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 368 - Private Saxophone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 369 - Private Bassoon**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 370 - Private Trumpet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 371 - Private Trombone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 372 - Private French Horn**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 373 - Private Euphonium**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 374 - Private Tuba**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 375 - Private Percussion**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 376 - Junior Recital**

**(0)**

A public recital, approximately thirty minutes in length, given in the student's major performing area comprised predominantly of solo repertoire but also includes a work for small ensemble. Offered every fall and spring semester.

Prerequisite(s): 300 level in performing area.

**MUA 455 - Private Voice**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 456 - Private Piano**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 457 - Private Organ**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 458 - Private Harpsichord**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 459 - Private Violin**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 460 - Private Viola**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 461 - Private Violoncello**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 462 - Private String Bass**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 463 - Private Guitar**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 464 - Private Harp**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be

achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 465 - Private Flute**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 466 - Private Oboe**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 467 - Private Clarinet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 468 - Private Saxophone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 469 - Private Bassoon**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 470 - Private Trumpet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 471 - Private Trombone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 472 - Private French Horn**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 473 - Private Euphonium**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 474 - Private Tuba**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 475 - Private Percussion**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 476 - Senior Recital**

**(0)**

A public solo recital, approximately one hour in length, given in the student's major performing area. Offered every fall and spring semester.

Prerequisite(s): MUA 376.

## **Psychology**

### **PSY 101 - Psychology of Personal Development - First Year Experience (GE)**

**(3)**

A first-year introduction to issues and various theories in psychology which allow students to reflect on their personal social, mental, and spiritual development. The course emphasizes various attitudes and skills which contribute to academic success as well as providing a better understanding of the specific religious and social culture of Point Loma Nazarene University. Discussions, lectures, and small group experiences are the major components of this course. *(Required of all students who graduated from high school the year prior to enrollment at PLNU).* Letter Graded.

### **PSY 103 - General Psychology (GE)**

**(3)**

A survey of psychology as an empirical/behavioral science. Topics include biological correlates of behavior, learning, cognition, emotion, motivation, personality, assessment, development, psychopathology, psychotherapy, and social psychology. Students who were not in high school in the previous year are required to take Psychology 103 instead of Psychology 101.

Prerequisite(s): PSY 101 (may be taken concurrently).

### **PSY 270 - Career Exploration**

**(2-4)**

Students are placed in local mental health or social service agencies to obtain direct exposure in the field. The goal is to help them evaluate their career options and direction. May be repeated up to a total of six units. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor and approval of departmental faculty.

### **PSY 300 - Personality and Adult Development**

**(4)**

An introductory survey of classic theories and contemporary empirical research in the fields of personality and adult development psychology. Distinct domains of knowledge regarding human nature, individual differences, and adult development and aging are covered. Emphasis is placed on developing a greater capacity for self-awareness and critical thinking.

### **PSY 301 - Physiological and Neuropsychology**

**(4)**

A study of the anatomical and physiological bases of mental events and behavior. Offered fall only.

Prerequisite(s): PSY 103 and PSY 390 or consent of instructor.

### **PSY 308 - Developmental Psychology – Birth Through Adolescence**

**(4)**

A systematic study of the physical, cognitive, social, and emotional development of the individual from birth through adolescence.

### **PSY 315 - Positive Psychology**

**(3)**

An examination of the scientific study of optimal functioning. Emphasis is placed on leading a meaningful and fulfilling life that benefits both person and society. Small group activities and daily assignments are required. Not Repeatable. Offered spring only. Letter Graded.

Pre or Corequisite: PSY 103 or consent of instructor.

### **PSY 320 - Social Psychology**

**(3)**

A study of the theories and methods of social interactions in the development of personal and group behavior. Topics include attitudes, communication, and pro-social and anti-social behaviors. Offered fall only.

Also offered as SOC 320 in the spring.

### **PSY 321 - Abnormal Psychology**

**(3)**

Study of etiology, assessment, diagnosis, and treatment of various forms of abnormal behavior from various psychological perspectives.

Prerequisite(s): One of PSY 103, PSY 308, FCS 150 or consent of instructor.

### **PSY 325 - Clinical and Community Interventions**

**(4)**

This course provides an overview of the fields of clinical and community psychology. It focuses on individual, family and systems, social-community, bio-psycho-social, and health interventions. Career directions within the mental health professions are introduced. Theories and interventions include cognitive-behavioral, humanistic-existential, psycho-dynamic-psychoanalytic, and systems. Focus is on how therapists apply therapeutic knowledge in a variety of settings.

### **PSY 330 - Moral Psychology and Cultural Values**

**(4)**

Introduction to the psychological study of morality, prosocial behavior, and character development, including a survey of historical and contemporary theories of morality. Includes a particular emphasis on the role of cultural norms and values, as well as an analysis of the ways in which such values are developed and transmitted in contemporary culture (e.g., media, academics, family, etc.). Small group activities are included. Offered spring only.

Prerequisite(s): PSY 101

### **PSY 341 - Group Counseling**

**(1-3)**

A group method experience which introduces theories used to modify, ameliorate, or change personal behavior. Each student is required to lead discussions with a group of up to ten freshmen students in order to discuss and explore various topics pertaining but not limited to social, mental, and spiritual development as they transition to college. May be repeated once for up to six (6) units total.

Prerequisite(s): Consent of instructor.

### **PSY 345 - Group Dynamics**

**(3)**

A laboratory learning experience in the formation and development of small group processes with emphasis upon understanding the effects of individual dynamics on the group.

Prerequisite(s): PSY 341 and consent of instructor.

### **PSY 349 - Intimate Couples**

**(3)**

A laboratory learning experience in building intimate and long-lasting marriage relationships. The course utilizes research based interventions that have effectively decreased the risk of divorce. This course must be taken with your spouse or fiancé. Letter

Prerequisite(s): Consent of instructor.

### **PSY 350 - Clinical and Research Assessment**

**(3)**

A detailed study of selected psychological assessment instruments used in clinical and research settings. Emphasis is placed on reliability and validity, as well as selection of tests for diagnosis, treatment planning, and research.

Prerequisite(s): PSY 390

### **PSY 360 - Human Sexuality**

**(3)**

Survey of behavioral, personality, and psycho-biological components of human sexuality, with emphasis upon delineation of facts from sexual myths, social context, and values. Offered spring only. Open to students who are not Psychology majors.

**PSY 380 - Family Development and Family Therapies**

**(3)**

Introduction to the normative stages and crises affecting families over the life span, and to the major theories of family and marital psychotherapy. Emphasis on how various models work with relational systems to facilitate development through times of crisis and developmental transition. Also focuses on therapeutic issues of substance abuse, and on legal issues involved in child, spousal, and elder abuse. Family developmental theories are applied to community organizations in order to assist students in understanding how system principles are used in community consultation.

Prerequisite(s): PSY 321 or consent of instructor.

**PSY 390 - Research Methods and Statistics I**

**(4)**

Students gain experience in methods of design, data collection, management, and analysis. Students begin a significant research project. This course must be taken in the semester immediately preceding PSY 391.

Prerequisite(s): PSY 103

**PSY 391 - Research Methods and Statistics II**

**(4)**

Study of design and of research in psychology and the use of statistics. Practice in the integration of design and statistics is included. Students finish a significant research project. This course must be taken in the semester immediately following PSY 390

Prerequisite(s): PSY 103 and PSY 390 or consent of instructor.

**PSY 400 - History and Contemporary Issues in Psychology**

**(2)**

A study of important ideas and debates in the history of psychology as they reappear in contemporary theory and research (e.g., the mind-body problem; nature-nurture). This course also provides a comprehensive review of important theories and findings in psychology in preparation for the GRE Subject Exam. An overview of the graduate school application process is offered.

Prerequisite(s): Psychology Major (or Minor) of senior standing or spring semester of the junior year, if applying to graduate school in the fall of the senior year.

**PSY 409 - Psychology of Cognition and Learning**

(4)

A study of the major theories and empirical findings in the fields of cognition and learning, as well as practical applications to human behavior. Laboratory activities may be included.

Prerequisite(s): PSY 103 and PSY 390 or consent of instructor.

#### **PSY 410 - Issues in Psychotherapy-Theology Integration**

(3)

More detailed study of issues involved in the integration of theological insights and psychotherapy approaches within the therapeutic setting. Includes an overview of the historical relationship between religion and psychotherapy, differing models of the therapeutic relationship, and various models for integrating psychotherapeutic theory with theological world views. Introduces specific issues that arise in conducting therapy with religious persons, including criteria for evaluating healthy and unhealthy forms of religious belief. Offered fall only.

Prerequisite(s): PSY 325 or PSY 380 or consent of instructor.

#### **PSY 420 - Pursuing Goodness: The Science of Moral Change (Senior Capstone)**

(4)

This course surveys some of the latest research in positive and moral psychology that concerns how we live a good life in a world with others. It addresses three perennial questions about personal and social well-being: What makes a good life *good*? What makes a good relationship good? And, how do persons change for good? It examines theory and research in three new psychological literatures: the science of a flourishing life, the science of love and virtue, and the practical neuroscience of moral change. Students will participate in experimental exercises that this new science suggests will enhance our motivation and capacity for moral goodness.

Prerequisite(s): PSY 101 or PSY 103 and BIB 101 or BIB 102. Senior standing or consent of instructor.

#### **PSY 440 - Psychology of Religion**

(4)

An introduction to selected topics in this sub-division of psychology, including religious conversion and spiritual development (especially Christian); dynamics of religious experience; the nature of altruism and love; and the impact of spiritual practices on character development, psychological well-being, and health. The course prepares students for graduate study in topics related to the integration of psychology and Christian (especially Wesleyan) practical theology. Offered fall only.

Prerequisite(s): PSY 101 or PSY 103. PSY 330 *is strongly recommended*.

#### **PSY 470 - Practicum in Psychology**

(3-4)

Students are placed in local mental health or social service agencies to obtain training in specific psychological skills. May be repeated up to a total of seven units. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor and approval of department faculty.

### **PSY 490 - Special Studies in Psychology**

**(1-3)**

Detailed study of selected individual topics in psychology. Designed for advanced students to go deeply into an area not included in the curriculum. May be repeated up to a total of six units. Offered on demand.

Prerequisite(s): Consent of instructor

### **PSY 499 - Research in Psychology**

**(1-4)**

Open to students of proven ability. Designed for students to undertake a significant self-initiated research project. May be repeated up to a total of twelve units.

Prerequisite(s): Consent of instructor and approval of department faculty.

## **Single Subject Teaching Credential**

### **EDU 4CP2 - Secondary Clinical Practice Seminar I**

**(1)**

This seminar course supports the Clinical Practice II experience through classroom inquiry and reflection of the principles of effective classroom management, teaching methods, differentiation of instruction, lesson planning and delivery, and parent communication. Emphasis is placed on the modification of lessons and instructional support of English learners, diverse learners, and learners with exceptionalities. Candidates explore school and community demographics and consider methods for teaching diverse populations. Graded Credit/No Credit. It is through this course that each candidate completes the CalTPA task "Assessing Learning" as a performance-based measure of the knowledge and skills taught in this course.

Corequisite(s): EDU 450  
Offered as EDU6CP2.

### **EDU 45S2 - Secondary Clinical Practice Seminar II**

**(1)**

This seminar course supports the Clinical Practice II experience through classroom inquiry and reflection of the principles of effective classroom management, teaching methods, differentiation of instruction, lesson planning and delivery, and parent communication. Emphasis is placed on further development of skills in the modification of lessons and instructional support of English learners, diverse learners, and learners with exceptionalities. Candidates continue to explore school and community demographics and consider methods for teaching diverse populations. Graded Credit/No Credit. It is through this course that each candidate completes the CalTPA task "Culminating Teaching Experience" as a performance-based measure of the knowledge and skills taught in this course.

Corequisite(s): EDU 455  
Offered as EDU6CP2.

### **EDU 420 - Literacy Instruction for Secondary Teachers**

**(3)**

This methodology course teaches the knowledge and skills necessary to support the literacy development of secondary learners, including English learners, across the content areas. The core areas of reading, writing, listening, and speaking, as outlined in the English Language Arts (7-12) Common Core standards, and the English Language Development standards, serve as the foundation and the focus. The development of reading comprehension skills, vocabulary development, and literary response and analysis and culturally diverse literature are emphasized. Instruction also emphasizes reading and writing across the curriculum to support content area knowledge. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied through field work experience.

Corequisite(s): EDU 420F

Offered as EDU 620.

### **EDU 421 - General Methods for Secondary Teachers**

**(3)**

This methodology course explores current pedagogy and its research underpinnings with the goal of implementing specific strategies, techniques, and practice of the methods presented. Candidates demonstrate mastery of specific competencies including literacy and language development in detailed lesson plans to make content accessible to all learners through developmentally appropriate pedagogy, effective questioning techniques, and use of appropriate resources. Candidates' demonstration lessons provide opportunity for reflection on attempted practices. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied through field work experience. Technology for teaching and learning is integrated in the course. It is through this course that each candidate completes the CalTPA task "Designing Instruction" as a performance-based measure of the knowledge and skills taught in this course.

Corequisite(s): EDU 421F

Offered as EDU 621

### **EDU 421F - Fieldwork for General Methods for Secondary Teachers**

**(0.5)**

This fieldwork course requires 15 clock hours of observation and participation specific to content area teaching strategies in a culturally diverse and inclusive school setting. Candidates are responsible for transportation to and from the school site. Graded Credit/No Credit.

Corequisite(s): EDU 421

Offered as EDU 621F

### **EDU 450 - Secondary Clinical Practice I**

**(4)**

This Clinical Practice experience provides the candidate with an opportunity to work directly with learners in a

university assigned secondary classroom with a Cooperating Teacher. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver instruction in the secondary classroom. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communications. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. Graded Credit/No Credit. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Corequisite(s): EDU 4CP2  
Offered as EDU 640

### **EDU 455 - Secondary Clinical Practice II**

**(4)**

This course is the second Clinical Practice teaching experience. Student Teachers are assigned to a different content area and/or grade level in a secondary classroom than in the first Clinical Practice experience with an approved Cooperating Teacher. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver instruction in this new secondary classroom setting. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communication. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. Graded Credit/No Credit. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Corequisite(s): EDU 45S2  
Offered as EDU 644

## **Sociology**

### **SOC 101 - Introduction to Sociology (GE)**

**(3)**

An introduction to sociology, basic concepts, theories, development as a discipline, and the tools of social investigation.

### **SOC 103 - Social Problems (GE)**

**(3)**

An analysis of some of the causes and implications of many of the most pressing social problems which confront us today. An attempt to develop ways to attack these problems. Offered spring.

### **SOC 111 - Introduction to Sociology: Practicum**

**(1)**

The application of basic sociological concepts to student service/ministry experiences. Lecture and field work. Offered

fall.

Corequisite(s): SOC 101 or consent of instructor.

**SOC 201 - Cultural Anthropology (GE)**

**(3)**

An introduction to the basic concepts, methods and findings of cultural anthropology. Emphasis is on the comparative study of contemporary cultures to develop an understanding of the cultural diversity that confronts society and the common threads that bind people together.

**SOC 209 - Introduction to Criminal Justice**

**(3)**

An introduction to and comparative examination of the components of the justice process dealing with delinquent and criminal behavior. Examines criminally deviant behavior in a complex society. Offered spring.

**SOC 222 - Exploring Diversity Through Intergroup Dialogue**

**(1)**

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill in, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships.

**SOC 250 - Sociology of the Family**

**(3)**

A study of the changing nature and function of the family as a basic institution of society with emphasis upon variety related to culture, class, and ethnicity.

**SOC 260 - Sociological Analysis**

**(3)**

A course designed to enhance understanding of the sociological perspective including the ability to think and write descriptively and analytically. Offered fall.

Prerequisite(s): SOC 101 or SOC 201 or consent of the instructor.

**SOC 303 - Urban Issues**

**(3)**

An interdisciplinary exploration of life as it is experienced in the urban environment. Students are exposed to broad issues of global urban life with particular focus on the San Diego/Tijuana metroplex. Special attention is given to the variety of ways people create meaningful lives for themselves in multicultural, urban environments and to the social organization that supports the life of the poor. Offered as a summer course in even years.

Prerequisite(s): Consent of instructor.

**SOC 305 - Social Stratification**

(3)

Social stratification as part of social organization. A review of the major theories, methods of studying stratification and evidence relating to the origin, nature and functioning of systems of social inequality bases of stratification; relationships among class, status and power. Class consciousness and conflict; technological change and social mobility. Offered spring of even years.

Prerequisite(s): SOC 101 or SOC 201 or consent of the instructor.

**SOC 310 - Criminology**

(3)

The study of crime and criminal behavior, the role of law, efforts at prevention and control. Offered fall.

Prerequisite(s): SOC 101 or SOC 201 or consent of the instructor.

**SOC 314 - Juvenile Delinquency**

(3)

A study of the youthful offender including theories of cause, the role of law and authority, and current trends. Offered spring.

Prerequisite(s): SOC 101 or SOC 201 or consent of instructor.

**SOC 316 - Sociology of Aging**

(3)

Analysis of aging within social contexts: the aging process, death, and dying, and the impact of psychological, economic, physiological, and social factors. Offered fall of even years.

Prerequisite(s): SOC 101 or SOC 201 or consent of the instructor.

**SOC 320 - Social Psychology**

(3)

A study of the theories and methods of social interactions in the development of personal and group behavior. Topics include attitudes, communication, pro-social, and anti-social behaviors.

Also offered as PSY 320.

**SOC 321 - Justice, Politics, and the Social World**

**(3)**

This course traces the emergence and development of political and social philosophy, with special consideration given to Plato's notion of justice, Social Contract Theory, Marxism, racial justice, feminism and Poststructuralism. Offered alternate years.

Prerequisite(s): PHL 201 or PHL 211 .  
Also offered as PHL 321.

**SOC 330 - The Development of Feminist Thought (WS)**

**(4)**

A survey of the development of various strands of feminist thought, and engagement in current conversations within and about feminism. Offered spring of even years.

**SOC 350 - Urban Sociology**

**(3)**

A study of urbanization as a social process, comparing urban, suburban, and metropolitan phenomena. Attention is given to institutions in changing urban settings, i.e., religion, family as it is applied to ministry. Offered spring of even years.

Prerequisite(s): SOC 101 or SOC 201 or consent of the instructor.

**SOC 360 - Race and Ethnicity**

**(3)**

An analysis of historical and current social factors relating to various ethnic, racial, and status groups. Focus is upon issues of discrimination and oppression.

**SOC 375 - African Cultures and Histories**

**(3)**

An interdisciplinary examination of the social and cultural histories of Africa with emphasis on the contact between Africans and Europeans since the late 19th century. Offered fall of odd years.

Also offered as HIS 375

**SOC 409 - Criminal Law**

**(3)**

To understand the role of the state in criminal law, this course studies the nature, origins and general principles of criminal law, including causation, defenses of justification and excuse, and criminal liability. Cases highlight and illustrate the general principles and doctrines in the context of real life. Crimes against persons, habitation, property and public order, and morals. Offered fall of odd years.

Prerequisite(s): SOC 101 or SOC 201 and SOC 209 or consent of instructor.

### **SOC 410 - Constitutional Foundations of Criminal Justice**

**(3)**

Examination of the federal constitutional provisions which impact the criminal justice system with an emphasis on the amendments in the Bill of Rights dealing with searches and seizures by law enforcement officers, the exclusionary rule, the privilege against self-incrimination, the rights to due process and the assistance of counsel, the death penalty, and constraints on the correctional system. Offered fall of even years.

Prerequisite(s): SOC 101 and SOC 209 or consent of the instructor.

### **SOC 415 - Social Theory**

**(3)**

Investigation and analysis of 19th century and more recent sociological thought, and philosophical and social issues surrounding it. the relation of sociological theory and Christian thought is considered. Offered fall.

Prerequisite(s): SOC 101 or SOC 201 or consent of the instructor.

### **SOC 420 - Social Change**

**(3)**

Study of social changes in modern societies; the source of change, processes such as social change movements by which change occurs, and the meanings of change for individuals and institutions. Offered fall of even years.

Prerequisite(s): SOC 101 or SOC 201 or consent of instructor.

### **SOC 430 - Sociology of Religion**

**(3)**

Comparative and analytical study of religion as a social institution; the relation of religion to social stratification, economy, state; religion as an agent of social change and stability. Offered fall.

Prerequisite(s): SOC 101 or SOC 201 or consent of the instructor.

### **SOC 444 - Globalization and Culture**

**(3)**

An exploration of the history, nature and trajectories of globalization with particular attention to people groups on the margins. Rooted in ethnographic accounts of how the dominant political and economic systems affect those that have least access to power and wealth, this course critically examines the cultural patterns and social structures associated with globalization and the creative resistance that follows. Offered in the spring of even years.

### **SOC 460 - Social Research Methods and Design**

**(4)**

A study and application of the methods of social research: development of a design, collection and analysis of data, and

development of a final report. Offered spring.

Prerequisite(s): SOC 101 or SOC 201 or consent of instructor.

### **SOC 470 - Medical Sociology**

**(3)**

An introduction the field of medical sociology and to a perspective on health and illness and the health care system. the course examines social and cultural factors related to health and nonhealth, including the nature of the problems addressed by health care institutions, societal responses to disease and sickness, and the institutional and organizational settings of health care. Offered spring of odd years.

Prerequisite(s): SOC 101 or SOC 201 or consent of instructor.

### **SOC 471 - Internship in Sociology**

**(2-4)**

Designed to provide experience in applied settings. A minimum of three hours per week for a full semester is required for each unit of credit. Placement and plan for internship are developed in consultation by instructor, student, and agency. May be repeated for up to a total of six units of credit. Students may receive credit for a maximum of six units for internship whether Sociology 471 or SOC 472. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor.

### **SOC 472 - Internship in Criminal Justice**

**(2-4)**

Intended for Sociology majors with a concentration in Criminal Justice. This course allows students to gain experience in a criminal justice setting. Students are required to complete a minimum of 12 hours per week in an approved setting in the criminal justice system. May be repeated for up to a total of six units of credit. Students may receive credit for a maximum of six units for internship whether SOC 471 or Sociology 472. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor.

### **SOC 475 - Sociology of Education**

**(3)**

A study of the social foundations of the American education system and the various community settings where education takes place. Emphasis upon current educational dynamics. Offered spring of odd years.

Prerequisite(s): SOC 101 or SOC 201 or consent of instructor.

### **SOC 476 - Senior Seminar in Sociology**

**(3)**

Intended for Sociology majors, including those with concentration in Criminal Justice. Course provides opportunity to integrate material learned in other sociology courses as well as opportunity to integrate academic learning with personal

experiences. During the course, students will write a senior thesis. Offered fall.

Prerequisite(s): Senior standing and major in Sociology.

### **SOC 490 - Special Topics in Sociology**

**(1-4)**

Selected topics of current interest in depth. Application through travel or special projects may be an essential part of the course. May be repeated for up to a total of six units. Students wishing to earn more than six units must have consent of the department chair and the Vice Provost for Academic Administration.

Prerequisite(s): Consent of instructor

### **SOC 491 - Independent Studies in Sociology**

**(1-4)**

An intensive study of selected issues. A plan for the study must be approved by instructor and department chair. May be repeated for up to a total of six units.

Prerequisite(s): Consent of instructor.

## **Social Work**

### **SWK 303 - Introduction to Social Work**

**(3)**

An historical and contemporary view of the profession of social work within the field of social welfare: the values, the ethical standards, the knowledge base, and the social welfare programs and services where social workers practice. Offered fall.

### **SWK 330 - Social Welfare Policy**

**(3)**

A study of private and public programs and services that make up the American welfare system. A study of policy analysis and development with focus on the needs of special populations. Offered spring.

Prerequisite(s): SWK 303 or consent of instructor.

### **SWK 340 - Child Welfare**

**(3)**

Analysis of the effects of family breakdown with special emphasis on children of divorce, single parent families, HIV and drug-exposed children, children of minorities, and children of poverty. Offered fall.

### **SWK 365 - Human Behavior in the Social Environment**

**(3)**

As generalists in the practice of social work the entry-level professional social worker is assisted in the organization of knowledge by a social systems approach. Systems examined include individual development across the life span, families, large and small groups, neighborhoods, communities, and organizations. Offered spring.

### **SWK 370 - Social Work Practice I**

**(3)**

A study of the theories and methods of professional social work practice. Focus is upon generalist practice with individuals, families, and small groups. Offered fall.

Prerequisite(s): SWK 303.

### **SWK 371 - Social Work Practice II**

**(3)**

A study of the theories and methods of professional social work practice with large groups, organizations, neighborhoods, communities, and governments. Offered spring.

Prerequisite(s): SWK 370 or consent of instructor.

### **SWK 470 - Social Work Practicum I**

**(4)**

Intended for seniors in social work. Students will be placed in approved social agencies, supervised by professional social workers. Entry-level practice placements include work with children, the aged, families, homeless and other special needs populations in a health, corrections, residential, community, or mental health settings. A student must complete a minimum of 200 hours of social work practice.

Prerequisite(s): SWK 370 or consent of the Director of Social Work.

### **SWK 471 - Social Work Practicum II**

**(4)**

Intended for seniors in social work only. the student completes a minimum of 200 hours in direct practice in an approved, supervised field setting.

Prerequisite(s): SWK 470 or consent of the Director of Social Work.

### **SWK 472 - Seminar in Social Work I**

**(2)**

Seminar for social work majors which integrates a liberal arts perspective with the professional social work foundation of knowledge, skills, and values. Students share field practicum experiences from the beginning phases of the social

work process as a method of reinforcing their understanding of the professional social worker engaged in generalist practice. Offered fall.

Prerequisite(s): Prior or concurrent enrollment in SWK 470.

### **SWK 473 - Seminar in Social Work II**

**(2)**

Continuing seminar for social work majors only; continues the sharing of the practicum experience and concentrates on the later phases of the social work process. Offered spring.

Prerequisite(s): Prior or concurrent enrollment in SWK 471.

### **SWK 490 - Selected Topics in Social Work**

**(1-4)**

Selected topics of current interest in depth. May be repeated for up to a total of six units. Students wishing to earn more than six units must have consent of the department chair and the Vice Provost for Academic Administration.

Prerequisite(s): Consent of instructor.

### **SWK 491 - Independent Studies in Social Work**

**(1-4)**

An intensive study of selected issues. A plan for the study must be approved by the instructor and department chair. May be repeated for up to a total of six units.

Prerequisite(s): Consent of instructor.

## **Spanish**

### **SPA 101 - Elementary Spanish I (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom. Offered fall, spring, and summer.

### **SPA 102 - Elementary Spanish II (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom. Offered fall, spring, and summer.

### **SPA 250 - Intermediate Spanish I**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Language lab practice is continued. Conducted in Spanish.

Prerequisite(s): SPA 102 or consent of instructor.

### **SPA 251 - Intermediate Spanish II**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Language lab practice is continued. Conducted in Spanish.

Prerequisite(s): SPA 250 or consent of instructor.

### **SPA 302 - Advanced Grammar and Reading**

**(3)**

An in-depth study of the grammatical structure of Spanish with emphasis on syntax, stylistics, and lexical problems as encountered in reading. Conducted in Spanish.

Prerequisite(s): Spanish 251 or consent of instructor.

### **SPA 303 - Advanced Conversation and Composition**

**(3)**

A course designed to refine the skills of advanced communication through the study of basic phonetics, continuation of grammar review, writing, and the study of semantics. Conducted in Spanish.

Prerequisite(s): Spanish 302 or consent of instructor.

### **SPA 310 - Latin American Culture and Civilization**

**(3)**

The history and civilization of Latin America including indigenous and Hispanic cultures of Mexico, Central, and South America from pre-colonial times to the present. Conducted in Spanish.

Prerequisite(s): Spanish 251 or consent of instructor.

### **SPA 315 - Culture and Civilization of Spain**

**(3)**

The history of the Iberian peninsula from prehistoric times to the present. the life, through art and literature, of the

various peoples who integrated the Spanish nation. Conducted in Spanish.

Prerequisite(s): Spanish 251 or consent of instructor.

Recommended: Spanish 302, 303.

### **SPA 320 - Mexican American Literature and Culture**

**(3)**

A survey of major 20th century Mexican American writers and their cultural heritage in the United States. Genres for consideration include short story, poetry, novel, and drama. Conducted in Spanish.

Prerequisite(s): SPA 302 and SPA 303 or consent of instructor.

### **SPA 380 - Genre/period Studies in Hispanic Literature or Film**

**(3)**

A study of a literary genre or period of Hispanic literature or film. Conducted in Spanish.

Prerequisite(s): SPA 302 and SPA 303 (SPA 303 may be concurrent).

### **SPA 390 - Current Spanish Linguistics**

**(3)**

A descriptive study of the Spanish language including phonology, morphology, syntax, lexicon, and semantics. Conducted in Spanish.

Prerequisite(s): SPA 302.

### **SPA 400 - Peninsular Literature Before 1800**

**(3)**

Analysis and discussion of representative works from the medieval era to the 18th century. Conducted in Spanish.

Prerequisite(s): SPA 302 and SPA 303 or consent of instructor.

### **SPA 402 - Peninsular Literature Since 1800**

**(3)**

Analysis and discussion of representative works from the 19th century to the present. Conducted in Spanish.

Prerequisite(s): SPA 302 and SPA 303 or consent of instructor.

### **SPA 437 - Latin American Literature Before 1910**

**(3)**

A study of the development of literary genres featuring representative works from Mexican, Central, and South

American writers from the pre-Columbian period to the Mexican revolution. Conducted in Spanish.

Prerequisite(s): SPA 302 and SPA 303 or consent of instructor.

**SPA 439 - Latin American Literature Since 1910**

**(3)**

A study of the Latin American narrative from the Mexican revolution to the present day. Conducted in Spanish.

Prerequisite(s): SPA 302 and SPA 303 or consent of instructor.

**SPA 485 - Senior Seminar in Spanish**

**(1)**

A course designed to reflect upon and to integrate issues of culture, civilization, language, and literatures of the Spanish-speaking world. Research is conducted to see how areas such as cultural contrasts, linguistic and lexical variations, and political and artistic realities have influenced modern literary pieces. Completion of a portfolio and a summative evaluation of language skills required.

Prerequisite(s): SPA 302, SPA 303 and Senior standing.

**SPA 490 - Special Studies in Spanish**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated to a total of six units.

Prerequisite(s): Consent of instructor and department chair.

**SPA 499 - Research in Spanish**

**(1-3)**

Independent research under the guidance of a faculty member.

Prerequisite(s): Consent of instructor and department chair and senior standing.

**Theatre**

**TRE 101 - Introduction to Theatre (GE)**

**(2)**

Introductory theatre appreciation course. Historical and stylistic developments are studied as well as the elements of theatre. Includes basic terminology and instruction for aesthetic understanding of western theatre form.

**TRE 204 - Orientation to Theatre**

**(3)**

Entry level course for the student majoring in theatre as well as for those interested in a deeper understanding of the theatrical profession. Course includes study and discussion of critical issues within the arts as well as tours of local professional theatres, libraries, and bookstores.

**TRE 210 - Theatre Practicum I**

**(1-2)**

Requirements vary according to the activity developed in consultation with the instructor. May be repeated up to a total of three units. Graded Credit/No Credit.

**TRE 250 - Voice and Diction**

**(2)**

Practical training in developing the speaking voice, articulation, and pronunciation through a variety of applications including stage, film, and broadcasting.

**TRE 270 - Acting I**

**(3)**

Development of basic acting techniques and vocabulary through exercises, character analysis, monologues, and scene work.

**TRE 304 - Theatre History**

**(3)**

A survey of theatre practice, trends, and styles from the Greeks to the present.

**TRE 350 - Musical Theatre**

**(3)**

Exploration of the historical and theoretical approaches for this unique genre, as well as development of practical performances skills. Acting, directing, and choreographing is explored in workshop performances from representative musicals, in addition to attending and analyzing area productions.

**TRE 354 - Movement I**

**(3)**

Introduction to the Laban "effort shaping" method. Essential for the study of mime, mask, and advanced stage movement techniques.

**TRE 370 - Acting II**

**(3)**

Advanced study of role interpretation, with emphasis on character analysis and scene work.

Prerequisite(s): TRE 270.

**TRE 385 - Directing**

**(2)**

Consideration of aesthetic and technical aspects of stage directing. Focuses on script analysis and interpretation, conceptualization, and theatrical communication.

Prerequisite(s): TRE 270 and TRE 354.

**TRE 420 - Theatre Practicum II**

**(1-2)**

Prior university experience in applied theatre activities is required. Continued application of communication concepts and skills. Requirements vary according to the activity developed in consultation with the instructor. Credit not applicable toward upper-division requirements in the department. May be repeated for up to a total of eight units. Graded Credit/NoCredit.

**TRE 421 - Internship in Theatre**

**(3)**

Participation in an internship supervised by departmental faculty. May be repeated up to a total of six units. Graded Credit/No Credit.

Prerequisite(s): Senior standing or consent of instructor.

**TRE 422 - Portfolio Construction Practicum**

**(1)**

Completion of portfolio and/or supporting documentation for evaluative instruments of performance assessment. Graded Credit/No Credit.

**TRE 436 - Stagecraft Techniques**

**(2)**

Study of production and stagecraft practice including selection of script, management, set and costume design and construction, props, and sound.

**TRE 437 - Lighting and Makeup Techniques**

**(2)**

Study of McCandless lighting theory and practice, as well as study of street and stage makeup techniques. Students complete practical exercises in design and application for both areas.

#### **TRE 451 - Movement II**

**(3)**

Continuation of the Laban “effort shaping” method with emphasis on construction of a “movement piece.”

Prerequisite(s): TRE 354.

#### **TRE 490 - Special Studies in Theatre**

**(1-3)**

Intensive study of a selected problem by an individual or group in the field of theatre under the direction of a member of the department. May be repeated up to a total of six units.

Prerequisite(s): Consent of instructor.

### **Theology**

#### **THE 250 - Introduction to Christian Theology**

**(3)**

This course introduces students to the study of Christian theology and to the body of Christian doctrines. It approaches Christian theology from the perspective of the Wesleyan theological tradition. Offered annually.

Prerequisite(s): BIB 101 or BIB 102.

#### **THE 305 - Christian Faith and the Natural Sciences**

**(3)**

This course explores central Christian convictions, e.g., the doctrines of creation, providence, the incarnation and the resurrection of the body, in careful and respectful dialogue with the natural sciences, especially cosmology and biological evolution. Offered alternate years.

Prerequisite(s): BIB 101 or BIB 102.

#### **THE 306 - The Life of Holiness (GE)**

**(3)**

A study of the biblical foundations of the Holiness message, Wesleyan theological perspectives set in the context of the history of the Church, and the classic disciplines of spiritual formation.

Prerequisite(s): BIB 101 or BIB 102.

### **THE 315 - Christian and Religious Themes in Literature**

**(3)**

This course explores theological themes, beliefs, and practices, as well as literary images of God, evil, and redemption in short stories, novels and poems. Offered alternate years.

Prerequisite(s): BIB 101 or BIB 102.

### **THE 320 - The World's Faith Traditions**

**(3)**

This course introduces students to the convictions, writings, and practices of people in the Abrahamic (Jewish, Islamic, Sikh) and Asian (Hindu, Buddhist, Taoist, Confucian) traditions from a Wesleyan theological perspective. Offered alternate years.

Prerequisite(s): BIB 101 or BIB 102.

### **THE 325 - The Human Person and Theology and Psychology**

**(3)**

This course surveys views of human nature and personhood in the Christian tradition and also in leading psychological theories. It also examines the relationship between theological discourse and the discipline of psychology. Offered alternate years.

Prerequisite(s): BIB 101 or BIB 102.

### **THE 330 - Christ and the Church**

**(3)**

This course will examine the relationship between the Church's teachings on the identity and ministry of Jesus Christ (Christology) and the ongoing life of Christ's community of disciples, including worship, evangelism, the sacraments, the presence of the Holy Spirit, and eschatology. Offered alternate years.

Prerequisite(s): BIB 101 , BIB 102 and THE 250.

### **THE 335 - Christian Ethics**

**(3)**

This course studies major Christian ethical theories and views of the moral life. It also explores the Christian use of the leading philosophical theories of ethics. Finally, it examines contemporary moral issues such as justice, war and peace, work, and family. Offered alternate years.

Prerequisite(s): BIB 101 or BIB 102.

### **THE 410 - The Ministry and Sermons of John Wesley**

**(3)**

This course introduces students to the life, ministry, and preaching of the co-founder of Methodism as a model for contemporary Christian formation, service, and theological reflection. Offered alternate years.

Prerequisite(s): BIB 101 , BIB 102 and THE 250.

#### **THE 415 - Three Traditions of Protestant Theology**

**(3)**

This course will study traditions of Protestant theology in their historical origins, classic expressions, and contemporary manifestations. Offered alternate years.

#### **THE 490 - Special Studies in Theology**

**(1-3)**

An examination of a topic in theology not otherwise studied in the curriculum. May be repeated for a total of six units.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

#### **THE 495 - Justice in the Church: Gender, Households, and Unity in the Body of Christ**

**(3)**

The course will give special attention to the thought and practices of Christian righteousness in light of dynamics of inequity that have long faced Christian communities. Students will engage Christian tradition and contemporary life on the issues of the subjugation of women, economic alienation, slavery, racism and other structures of power. Approaches to these issues will be multi-disciplinary - underscoring the integration of biblical, theological, historical, and philosophical perspectives - and culminate in concrete practices of ministry.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

### **Women's Studies**

#### **WS 190 - The Politics of Race, Class, and Gender**

**(4)**

An introduction to politics, using an interdisciplinary approach to contemporary controversies surrounding issues of ethnicity, socioeconomic class and gender. This course includes historical, legal, and political perspectives. Offered every fall.

#### **WS 310 - Women in Christianity**

**(3)**

A study of issues related to women in the Bible and Christianity, including women's spiritual biographies, the use of

gender-inclusive language, the ordination of women into ministry, women in the Wesleyan/holiness tradition, and feminist and liberation theologies.

**WS 312 - Gender and Communication**

(3)

A study of how the self-perception of men and women evolves as a function of cultural influences and the differences and similarities in the way each uses communication patterns. Summers only.

**WS 330 - Development of Feminist Thought**

(4)

A survey of the development of various strands of feminist thought, and engagement in current conversations within and about feminism.

**WS 340 - Nutrition of Women's Well-being**

(2)

A survey of current evidence-based nutrition principles and guidelines corresponding to gender differences in health. Topics discussed include prevention of cardiovascular disease, diabetes, cancers, and osteoporosis in women as well as special needs in pregnancy/lactation, menopause and weight management. Computer applications. Offered every year.

**WS 415 - Women and Politics**

(4)

An examination of women's role in political life. the content includes analysis of gender as a legitimate category of political inquiry, gender-based social movements, women's political participation, and the impact of political systems and public policy on women.

**WS 437 - Women Writers**

(3)

Considers women writers from a specific chronological period from the Middle Ages up through the 20th century. the time period, themes and genres considered vary from year to year. the course focuses on questions related to gender, class, and race.

Recommended: LIT 250.

**WS 440 - Racial and Gender Issues in Economics and Education**

(2)

A study of social issues pertaining to race and gender in economics and education. the economic status of different races and genders is examined, and the impact of educational opportunity on races, genders and economic status are discussed. the extent to which discrimination inhibits educational opportunity and economic status is considered.

Prerequisite(s): Junior or Senior standing.  
Recommended: ECO 102 or Education 300.

### **WS 446 - Health of Women in a Multicultural World**

(3)

Explores the relationships between society, culture, environment, the health of women and the health care services women receive. the approach is global or international in perspective. Participants are expected to research their own cultural heritage and describe what impact this heritage has on personal health expectations and use of health care services in American society.

### **WS 447 - Family Violence**

(3)

A course examining the incidence of a broad range of abuse and neglect in society. the course covers both physical and sexual abuse as well as neglect in children from birth to adolescence, date rape, spousal abuse, and abuse of the elderly. the course examines causes, assessment criteria, current treatment approaches, requirements for reporting, and long-term effects on children, families, and society.

### **WS 475 - Topics in Women's History**

(4)

This seminar explores themes in the field of women's history. Women's roles and historical contributions, the context of gender relations, and methodologies of social and intellectual history are studied within a specific era or topic in American or World history.

## **Special Education**

### **EDU 492 - Assessment and Services for Students with Disabilities**

(3)

This methodology course explores current knowledge and best practice in the screening, referral, assessment, and placement procedures necessary to identify and qualify learners with disabilities for special education services. The significant issues of learners with disabilities is reviewed through discussions of the developmental, academic, behavioral, social, communication, vocational, and community life skill needs of individual learners in order to develop and implement effective programs. Strategies in consultation and coordination of the assessment process are addressed.  
Letter

EDU650

### **EDU 493 - Curricular and Instructional Adaptations for Students with Mild/Moderate Disabilities**

(3)

This methodology course provides current knowledge in the major educational practices of special education, including emergent issues, theories, and research as they relate to curricular and instructional decision-making for learners with mild/moderate disabilities. This course provides the necessary knowledge regarding curriculum, instruction, and technology, learning methodology and skill acquisition necessary to provide special education services.

EDU651

**EDU 494 - Collaboration and Consultation for IEP Implementation, Evaluation, and Program Improvement**

(3)

This methodology course provides expanded knowledge regarding the synthesis of all aspects of educating learners with disabilities. The candidate is given the opportunity to synthesize information related to the assessment of standards, short-range and long-range planning for learners, transition services language, and the effective use of consultation and collaboration skills. An emphasis of this course is training for collaboration with learners, parents, family members, school personnel, and agency representatives to build teams to ensure effective transitions across the lifespan of all learners.

EDU652

**Other Courses**

**EDU 410 - Methods of Teaching Reading and Writing**

(3)

This methodology course provides intensive instruction grounded in sound research to enable candidates to deliver a comprehensive program of systematic, explicit, and meaningfully-applied instruction in reading, writing, listening, and speaking. Opportunities for candidates to learn, understand, and effectively use materials, methods, and strategies to include culturally diverse literature for all learners are provided. Instruction is aligned to the state adopted English Language Arts Content Standards (K-8) and the English Language Development Standards. This course includes intentional practice of classroom management, active, and equitable participation for culturally, ethnically, linguistically, and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied through field work experience. Technology for teaching and learning is integrated in the course.

Concurrent: EDU410F  
EDU610

**Course Numbering**

Each course is assigned a number. The letters represent the department or discipline; the three digits designate the course and indicate its level as follows:

<b>Course Number</b>	<b>Classification</b>	<b>Level</b>
097-099	Remedial	Pre-university
100-199	Freshman	Lower-division
200-299	Sophomore	Lower-division
300-399	Junior	Upper-division

400-499	Senior	Upper-division
500-599	Credential	Post-baccalaureate

## **Prerequisite/Co-requisite**

Some courses listed in this Catalog stipulate either a prerequisite or a corequisite. A prerequisite is a condition or requirement that must be fulfilled prior to enrolling in a course, such as a specific student classification, consent of the instructor, or another course. A co-requisite refers to a condition or a requirement that must be met prior to or concurrent with enrollment in a course.

## **Alternate-year Offerings**

Many of the courses listed in this Catalog, particularly those at the upper-division level, are offered on alternate years. The university reserves the right to withdraw courses and to make changes in its class schedule and academic program as necessary. Students should contact individual departments and schools to be certain when courses are offered.

## **Quad Courses**

A limited number of concentrated offerings are available, offered in Quad pairs. Quad classes are offered in two consecutive sessions of eight weeks in length, two times during each of the sixteen-week fall and spring semesters.

## **Remedial Courses**

Remedial courses are those pertaining to skills that the university may reasonably expect a general student to possess upon entry to the university, or courses pertaining to those skills that are required for university-level work. These courses do not apply to total units required for graduation.

## **Special Designations**

Courses marked GE meet requirements in general education. Those marked WS are offered in the Women's Studies minor.

## **Co-Curricular Programs**

An education at Point Loma Nazarene University is characterized by the intentional interrelationship of the life of the mind, the development of character and personal wholeness, and spiritual formation facilitating a life of service. Thus, university life includes an array of activities and experiences designed deliberately to be seamless. Academic study becomes an act of one's "reasonable spiritual worship," community life and social relationships move in the context of a family that is intent on loving God with all one's "heart, soul, mind, and strength." Faith is seen not as a compartmentalized activity but as a way of life that embraces love for humanity and life-long learning.

Realizing that students spend more time out of class and formal academic settings than in class, the university provides a wide variety of opportunities for undergraduates in co-curricular programming. These include activities directly or indirectly related to academic programs, spiritual life options, and student leadership programs that emanate from the university's mission and sponsoring denominational relationships.

## **Academic Affairs**

Co-curricular activities in the area of Academic Affairs include, but are not limited to, the following: a nationally ranked forensic team; the annual Sunset Cliffs National Forensics Tournament hosted by the university; California Board of Registered Nursing-approved continuing education courses; the Phi Alpha Theta society for pre-law students; the Point Loma String Project; a wide variety of activities directed by the Fermanian Business and Economic Institute; and student summer research in biology, chemistry, mathematics, computer information systems, and computer sciences.

Other opportunities directly or indirectly related to specific majors and programs include a host of ensembles in the Department of Music such as Chorale, Concert Choir, Point Loma Singers, Choral Union, Chamber Orchestra, Concert Band, and Jazz Band; Urban Term, an intentional living community studying local urban issues in the context of ethnic diversity and low-income environments; radio station KPLR and the university television station, supported by the Department of Communication and Theatre; international study trips sponsored by the Center for International Development; summer marketing research, an honors program in the Fermanian School of Business; and an annual series of literary teas, Poetry Day, and a writer's symposium featuring nationally known personalities, sponsored by the Department of Literature, Journalism, and Modern Languages.

## **Spiritual Development**

The mission of the Office of Spiritual Development is to faithfully call the Point Loma Nazarene University community to spiritual vitality centered on the Lordship of Jesus Christ. The Office of Spiritual Development, through relationships and programming, seeks to join the larger university in its mission to teach, shape, and send.

Specifically, the Office of Spiritual Development desires to invite the university community into a deeper experience of God's love and to support students in their spiritual journey by creating opportunities for growth through reflection, discovery, and practice of our faith in Christ. It is the office's goal and prayer for the PLNU community to love God, love others, and love the world with body, mind, and spirit.

## **Corporate Worship**

### **Chapel**

Chapel is an integral part of the Point Loma Nazarene University experience. Chapel is a community gathering through which participants are shaped by God. This experience prepares all to love God, love one another, and love the world with a compassionate commitment. Chapel is a gift through which the university community pauses in the middle of busy lives to give thanks to God, seek God, and worship together. Chapel is a place of corporate worship, prayer, teaching, education, and growth. The primary purpose of chapel is to encourage the formation of Christian community and foster the development of a vibrant, life-changing relationship with Jesus Christ.

Chapel is held three times a week on Monday, Wednesday, and Friday at 9:45 a.m. It is the university's belief that chapel has an important role in Christian liberal arts education, and, as such, is required for all undergraduate students.

### **Time Out Chapel**

Every Wednesday at 9:30 p.m. students gather in an informal worship setting designed to encourage an intimate, personal relationship with God through music, prayer, sharing of life, and teaching from scripture.

## **Spiritual Care**

I Thessalonians 2:8 expresses the heart of the work in the Office of Spiritual Development: "We loved you so much that we were delighted to share with you not only the Gospel of God but our lives as well, because you had become so dear to us." Spiritual care offered in the context of loving relationships is at the center of the Office of Spiritual Development.

## **Spiritual Direction and Pastoral Care**

Encouraging a personal relationship with Jesus Christ is the university's highest priority. The prayer for every student is that, in their time at Point Loma Nazarene University, God's voice will be heard, God's will discovered, and God's mission embraced. The office staff is available to all members of the university community for prayer support, spiritual guidance, pastoral counseling, and pastoral care.

## **Worship Arts**

Worship Arts creates opportunities for students to assist in leading people in praise, worship, and response to God's voice. The office team seeks to partner with and develop students who are pursuing integrity in their relationship with God and neighbor and who demonstrate ability in their area of art or technology.

## **Chapel Music Bands**

In the spring semester, students interested in becoming lead worshippers on campus for the following academic year are interviewed and auditioned. Those selected begin an internship in Spiritual Development in the fall, providing leadership in various worship gatherings on campus, primarily in chapel. In the fall, PLNU students are invited to attend an informational meeting, followed by an audition and interview for those interested in serving and growing. From this process a network of students is created from which student worship leaders and the director of Worship Arts can draw as they lead around campus throughout the year. In addition, one band is created from the freshman class. This band works closely with the director of Worship Arts, rehearsing on a weekly basis and joining the worship leading rotation.

## **Summer Ministry Teams**

When the summer schedule allows, in the spring, two paid teams of 7-9 students are selected and trained to travel during the summer throughout the Southwest Educational Region of the Church of the Nazarene, ministering at churches, youth camps, conventions, and retreats. Their primary ministry vehicle is music, but it is a highly relational ministry. These students are selected through an interview and audition process.

## **Song-Writing**

Students interested in writing songs primarily for use in corporate worship are invited to gather on a bi-monthly basis to provide encouragement and constructive criticism to one another. Staff partner with various professors to help provide further feedback in a song's theology and music. From this program the office hopes to develop ability and confidence in song-writers as they hone their skills, writing songs that are both theologically sound and musically accessible for corporate worship.

## **Discipleship Ministries**

Discipleship Ministries create opportunities to seek and discover ways of living that reflect the life of Christ. When people engage in faithful ways of learning in order to live out what it means to love God and neighbor, practices become a sacred obligation that express joy, hope, and discernment. Programs in Discipleship Ministries invite the

student to engage in rhythms that include faithful reflection, spiritual nourishment and friendship, study of the Word, discussions on relevant issues in the culture and world, and the worship of God expressed in creative ways.

## **Discipleship Groups**

By participating in a D group, students enter into a weekly rhythm of creating a time for rest, encouragement, learning, and spiritual friendship. D groups encourage participating in ways that make an impact on the world in which students live.

## **Retreats**

Discipleship Ministries also offers spiritual formation retreats, men's retreat, and a women's retreat for the PLNU community. These weekend retreats offer opportunities for students, faculty, and staff to come together and build relationships with one another outside the normal university setting. Retreats focus on Christian formation through fellowship, worship, discussion, and sharing about personal life journeys.

## **Created Space**

Created space offers several workshops each semester to a small group of students who engage in prayer and worship through various forms of creative expression: art journaling, drawing, painting, sculpturing, etc. Each semester, a large prayer and worship event provides space for the student body to outwardly express spiritual growth and formation through creativity.

## **Student Ministries**

Student Ministries has more than 15 different student-led outreach groups with opportunities to serve with and alongside our neighbors throughout the greater San Diego area. Student groups connect weekly with established nonprofit organizations serving many diverse populations including: homeless individuals and families; adults and children with special needs; seniors living in assisted care facilities; kids and teens in tutoring programs; and many others. Every PLNU student can find a place to serve. No special skills or abilities are required, just a desire to give, receive, and be blessed by the rich relationships formed in Christian ministry. Seasoned student leaders oversee each ministry and transportation is provided to ongoing ministry opportunities as well as special events.

## **International Ministries**

International Ministries offers opportunities to those who want to partner with, fellowship with, and learn from Christian brothers and sisters around the world. International Ministries participants are privileged to come alongside church leaders, missionaries, and international development professionals and support on-going ministry in a variety of places around the world. While each location, culture, and ministry is unique, all programs genuinely value devoted Christian service with an attitude of humility, hospitality, and intercultural understanding.

## **LoveWorks Short-Term Missions**

The LoveWorks short-term mission program is a resource to church leaders, missionaries, pastors, and congregations serving Christ in various places around the world. Through the LoveWorks program, over 2,500 students, faculty, staff, and alumni have served and built relationships in Christ's name. LoveWorks has a reputation for sending well-trained, respectful, and energetic teams who have been a blessing to the church on every continent. Participant preparation, safety, and well-being are taken into account at all times. All team members are required to participate in weekly training sessions conducted by the Office of International Ministries.

## **Ministry with México**

Ministry with México offers the opportunity to serve in Northwest Baja (Tijuana, Tecate, and Rosarito) with student-led groups that partner with the Church of the Nazarene, orphanages, and government agencies. We offer three Saturday trips a month and all trips are accompanied by a faculty/staff/alumni sponsor.

## **Border Pilgrimage**

The Border Pilgrimage is a partnership between International Ministries and the Center for Justice and Reconciliation. One weekend each semester, we explore the border and learn about the complexities of this fascinating region. The experience includes expert presentations, travel to and across the border, and worshipping with a sister church in Tijuana.

## **Spring Break Build**

Over spring break 50 staff, faculty, alumni, and students work together to build a new sanctuary building with one of the Nazarene churches on the Northwest Baja district. Lazarian World Homes is an organization that has developed a sustainable building model using foam blocks. We use their technique and partner with their staff to accomplish this huge task. The evenings are spent in fellowship, worship services, and preparation for the next day's work.

## **GRADWorks**

GradWorks is an opportunity for recent graduates of PLNU to gain international work experience and serve using skills and gifts developed at PLNU. International service options are available around the world, ranging from three months to two years. Placements are made based on a networking of the skills and interests of the graduate with the needs and strategies of the host field location. The office of International Ministries provides logistical support and membership for students serving abroad.

## **Student Development**

Student Development at Point Loma Nazarene University is dedicated to engaging students in the active and energizing process of learning. The Office of Student Development coordinates a multitude of co-curricular programs in the areas of Athletics, Public Safety, Residential Life, Student Life and Retention, and Student Success and Wellness.

Point Loma Nazarene University believes that the most complete education prepares a person to live a full life. This quality education incorporates intelligence and reason as well as character, integrity, commitment, and faith. With this in mind, PLNU strives to educate the whole student to learn, grow, and serve.

## **Academic Support**

Student Success and Wellness at Point Loma Nazarene University provides academic support and academic enrichment services that focus on assisting students to achieve their educational and personal goals.

## **Disability Resource Center**

**University Policy on Disabilities.** PLNU is committed to providing reasonable services and accommodations to meet the needs of qualified students with disabilities to facilitate their academic goals, according to Section 504 of the Rehabilitation Act of 1973 and the Amended Americans with Disabilities Act of 2008. Individuals who may be eligible

for services include, but are not limited to, those with disabilities such as: learning, dietary, psychological, and physical impairments. These conditions must be of a degree that they impact a major life activity.

The Disability Resource Center (DRC) at PLNU is located in the Bond Academic Center (619-849-2486) and is the first point of contact for students who have documented disabilities. All accommodations and services are based on assessing the impact of the disability on life activities and academic performance; therefore students are required to provide documentation from a licensed professional to the Director of the Disability Resource Center prior to receiving accommodations.

**Request for Accommodations.** Students should submit current official documentation regarding their disability from their diagnosing licensed clinician. The Provider Documentation form can be found on the Forms page of the DRC webpage. Students are encouraged to self-disclose after acceptance into the university, so that the process of developing an accommodation plan may be initiated. Documentation submitted with the application for services should be recent, relevant, and comprehensive. If the original documentation is incomplete or inadequate to determine the extent of the disability or reasonable accommodations, the university has the discretion to require additional documentation.

**Appeal Process.** Students have the right to appeal decisions regarding accommodations. In order to provide prompt and equitable resolution, the student must submit a written or verbal statement to the Associate Dean of Student Success and Wellness who will conduct the appeal process in consultation with the Vice President for Student Development.

## Tutorial Services

The Tutorial Center provides a variety of free tutoring and academic enrichment services to assist undergraduate students in managing course curriculum requirements, such as:

- Academic coaching (time management, test-taking strategies, etc.)
- Review sessions
- One-on-one or small group peer tutoring (available for most courses)
- Peer editing services

The Tutorial Center is staffed by students who have received comprehensive training and are faculty-approved. Students are encouraged to visit or call the Tutorial Center (619-849-2593) to schedule an appointment.

## Athletics

### Intercollegiate

Point Loma Nazarene University is a member of the National Collegiate Athletic Association, Division II and participates in intercollegiate competition in the Pacific West Conference (PacWest). Intercollegiate sports for women include basketball, volleyball, cross-country, soccer, tennis, golf and track and field. Intercollegiate sports for men include basketball, soccer, tennis, and baseball.

#### Mission Statement

PLNU champions a Christ-centered environment where student-athletes experience holistic growth while pursuing academic and athletic distinction.

#### PLNU Athletic Goals

The following goals guide the course of intercollegiate athletics at PLNU:

- Student-athletes will develop the individual and team skills necessary to compete at the conference and regional levels. PLNU also welcomes the opportunity to compete nationally.

- PLNU will clearly communicate its Christ-centered mission to all competitors and will affiliate with regional and national conferences that respect its mission and provide a reasonable level of competition.
- PLNU maintains high academic standards for all students, including student-athletes. Scheduling of competition and travel will minimize academic disruption.
- PLNU's athletic teams and spectators will cultivate a competitive environment of good sportsmanship, reflecting fairness in competition, humility in victory, and dignity in defeat.
- Intercollegiate Athletics will provide opportunities for fan engagement and the cultivation of school spirit.
- The Athletics Department will align its fundraising and promotional efforts with the efforts of the offices of University Advancement and Admissions.
- Consistent with the history of the Church of the Nazarene and her affirmation of leadership by both women and men, Intercollegiate Athletics offers competitive opportunities to both women and men and fully complies with federal regulations related to gender equity.
- PLNU hires and develops coaches who are committed to Christ, possess university level coaching knowledge and skills, maintain a high standard of personal conduct, and are committed to the character development of their athletes.
- PLNU recruits student-athletes who understand and support the university mission. Each student-athlete will pursue a course of study designed to culminate in graduation from the university.
- Athletic Programs will be sponsored based on: adequate facilities in proximate distance of campus, adequate economic support, adequate student interest, adequate opportunities for competition within regional and national conference affiliation, and within the context of capped enrollment.

## **Intramural**

The intramural program is designed to enhance and extend the student's opportunities for wholesome and beneficial physical activities through recreational and competitive on-campus programs.

A vigorous intramural sports program is under the guidance of the intramural coordinator through the Department of Athletics. On-campus leagues are scheduled each semester and include: basketball, volleyball, softball, tennis, soccer, ultimate frisbee and others. Activities such as group aerobics are also offered.

## **Department of Public Safety**

The Department of Public Safety strives to maintain a safe environment for the university community. To achieve this, the department functions twenty-four hours a day, seven days a week. The university emergency telephone number is 619-849-2525.

**Vehicular Regulations.** Parking and driving on the campus is a privilege. The owner/driver is referred to the Student Handbook and University Vehicle Code for complete regulations.

**Vehicle Registration.** All vehicles operated by students must be registered. Freshman residential students are not permitted to bring vehicles to the university.

**Shuttle Services.** The Department of Physical Plant provides an on-campus shuttle and an off-campus shuttle. For additional information, students may refer to the Student Handbook.

## **Residential Life**

Approximately two-thirds of undergraduates live in university residence halls. The primary goal of residential life is to foster an environment in which vital Christianity is encouraged, experienced, and modeled. Residential life is an integral part of the co-curricular experience and encourages the academic, spiritual, and social growth of students. In addition, residential living provides students with an opportunity to meet students from a variety of backgrounds.

Application for admission to the university and application for on-campus housing are two separate steps. Students may refer to admission procedures for further information regarding housing. Residential housing options include eight traditional residence halls and two apartment buildings. The university does not guarantee housing for all four years.

## Off-Campus Housing

All single undergraduate students under the age of twenty-three (23) years of age are required to live in university housing. Exceptions to this policy are married students, students living with parents, or students residing in a live-in work situation. Occasionally, due to high housing demand, some upper-class students are permitted to live off campus.

Students requesting to live off campus must file an off-campus petition within established deadlines, through the Office of Residential Life. Each petition is carefully verified. Students who have had any serious disciplinary sanctions during the previous two semesters at the university are not eligible to live off-campus. Students with previous disciplinary violations at PLNU may not be eligible to live off campus; decisions are made on a case-by-case basis. Any change of residence or phone number must be changed on the student portal immediately.

## Residential Housing

**Application for Housing.** Students planning to live in a residence hall must file a Residence Hall Application and Contract as well as a housing deposit. For returning students, once registration for the fall semester is completed (which constitutes a reservation for the fall semester), the housing deposit is non-refundable. For new students, the deposit is refunded consistent with the dates published in admission materials. Refunds of board charges are made for any student who moves out of the residence hall during the course of a semester according to the schedule printed in the Catalog. Residence halls are officially closed during Christmas Recess and Spring Break. The right of occupancy does not include these periods.

**Residential Housing Assignments.** Residential housing assignments for new students are made after the housing staff considers such factors as classification and date of a paid housing contract. An attempt is made to make roommate assignments that are compatible and beneficial to all concerned. Specific roommate requests must be mutual and accompany the paid housing contract. New and transferring students receive their residence hall assignments as they become available through the on-line student portal. The university does not consider roommate change requests based upon actual or perceived race, ethnicity, national origin, age, disability, or perceptions based on personal profiles and/or information found on the Internet.

**Furnishings.** Residence hall rooms are furnished with window coverings, and each student is provided with an extra-long single bed, dresser, study table and chair. Students must provide their own bed linens and towels. While most cooking appliances are prohibited, a compact refrigerator (maximum 4.4 cu. ft.) and a small microwave (maximum of 800 watts) are allowed.

## Student Lifestyle

A major purpose of the university is to assist students in their preparation for daily living. The totality of the university environment is intended to be a learning experience. Some of the most significant learning occurs in the context of everyday experiences.

Students are expected to exercise self-discipline and sound judgment and to manage their conduct both on and off the main campus in a manner consistent with agreements made upon application and with the university Catalog and the Student Handbook. In addition, an accepted application for admission and subsequent registration is considered an agreement between the university and the student for the following:

- to demonstrate responsible citizenship by showing concern and respect for the freedom and rights of others;
- to give thoughtful attention to the development of personal values as a basis for wholesome Christian conduct;

- to practice a traditional Christian sexual ethic, which honors that sexual intimacy is reserved for the covenant of heterosexual marriage; and
  - to abstain from the use of alcoholic beverages, tobacco, illegal drugs, the use of profane language, gambling, pornography, and from entertainment which diminishes moral perceptivity and judgment.
- Point Loma Nazarene University has a strict policy regarding any use of alcohol, illegal drugs, and tobacco or smoking products. The university reserves the right to require a test for alcohol or drugs upon probable cause. The expense for tests with positive results is the student's responsibility. Participation in such activities is cause for disciplinary action, suspension, or termination from the university.

## Student Life

The offices within Student Life strive to provide place, voice, and connection for each PLNU student. A PLACE...to belong, to grow; a place safe enough to take risks, try new ways of doing and being; a VOICE...to question and explore, to declare oneself; a voice for the present and the future; a CONNECTION...of faith, of reason, of friendship, of community. These opportunities exist through the numerous resources and co-curricular programs provided by the offices within Student Life. Student Life includes the following offices and services: Offices of Strengths and Vocation (career / vocational counseling, student employment, internships, strengths utilization), Community Life (student leadership, student government, student organizations, student activities, student media), Commuter Student Services, Multicultural and International Student Services, Nicholson Commons (student center, student activities), Outdoor Leadership and Recreation, and Transfer Student Services. In addition to these services, Student Life and Retention, through the Offices of Strengths and Vocation, utilizes a strengths development program for college students that provides opportunities to develop strengths by building on their greatest talents. Finally, Student Life provides Chapel Attendance operational assistance for students.

## Community Life

The Office of Community Life seeks to assist students in their personal growth and in leadership development. Experiential leadership opportunities are designed as a developmental offering and range from leadership in a club, serving on the Board of Directors, and planning student activities. Student activity programs offered through Student Government provide quality and affordable activities throughout the academic year.

## Student Government (ASB)

The Associated Student Body of Point Loma Nazarene University (ASB) is a constitutional organization of the entire student body created for the purpose of (a) providing meaningful, student-sponsored educational, social, cultural, religious, and service opportunities for member students; (b) fostering constructive communication and interaction between the members and the administration and faculty; (c) fostering good relations between ASB members and the university's surrounding community; (d) establishing rapport with other student associations with similar objectives; and (e) providing opportunities for members to develop leadership qualities. The affairs of the ASB are managed by a student board of directors elected and appointed by the student body. The Director of Community Life serves as advisor to the student government program.

## Student Organizations

Students may join or affiliate with many student led organizations that are chartered or recognized by PLNU. A student may contact the ASB Director of Student Relations, 619-849-2406, for more information.

**Phi Delta Lambda** is the national honor society for all educational institutions of the Church of the Nazarene, for undergraduate students who are academically ranked in the upper-fifteen percent of the graduating class; these students are recognized during the undergraduate commencement ceremonies.

## Student Media

**Student Newspaper.** The official publication of the student body is The Point. The editor is appointed by the Media Board, subject to certain scholastic and residence requirements. The staff, recommended by the editor and approved by the Media Board, affords interested students an opportunity for practical training in journalism. The subscription price for the paper is included in the general fee.

**Other Publications.** The **Student Handbook** is published electronically each year; it clarifies community standards that guide the conduct of students and contains PLNU's student conduct processes. It is available on the PLNU website by searching "Student Handbook." **The Driftwood** is the annual student literary magazine published by the Department of Literature, Journalism, and Modern Languages. Students from all majors, faculty, and staff are encouraged to submit features, photographs, designs, and business ideas. Students from all majors may join the staff.

**Radio Station.** KPLR, the university radio station, provides professional training for students developing a career in broadcasting. The station serves the main campus and Internet listeners with a contemporary Christian format.

**Television Station.** PointTV, the university's cable broadcast medium, allows students to write and produce original programming that is aimed at educating and entertaining the on-campus community. PointTV strives to follow current industry standards in all areas of station operation. Staff positions are filled annually, and students from all majors are encouraged to participate.

## Commuter Student Services

Commuter Student Services is committed to providing services and programs for students who do not live in university residential housing. The current programmed activities are designed to stimulate social interaction among commuters. The Commuter Student Services office is located on the first floor of Nicholson Commons to serve as a primary point of contact for commuters and as an on-campus advocate for their unique needs. For more information about the kinds of events and services offered, students may visit [www.pointloma.edu/Commuter](http://www.pointloma.edu/Commuter).

## Multicultural and International Student Services

The Office of Multicultural & International Student Services is committed to value all as individuals-first! Much of what the office does is created in the spirit of building a community among all multicultural, bi-racial, international and multi-racial students, in order to secure academic and social GROUP success. This office seeks to build cross-cultural understanding, appreciation, and unity in the university community, accomplished by supporting students of multi-ethnic backgrounds as individuals and as part of student organizations. The university offers multicultural and international student services, as well as a diversity leadership scholarship.

### Multicultural Student Services

The director provides multicultural activity programming, supervises ethnic/cultural diverse student leadership groups, and helps coordinate interaction among alumni (MOSAIC Alumni Auxiliary), current students and prospective students of color. Connections are built primarily under the banner of MOSAIC (Multicultural Opportunities for Students Actively Involved in Community). This includes the Association of Latin American Students (ALAS), Black Student Union (BSU), Hui O' Hawai'i, International Club, Asian Student Union (ASU), Mu Kappa International, and Team Barnabas Mentoring Program. [http://www.pointloma.edu/Multicultural\\_Students.htm](http://www.pointloma.edu/Multicultural_Students.htm)

### International Student Services

International Student Services provides and organizes professional services for international students in the areas of admissions counseling, advising, encouragement, transition and assistance in complying with U.S. government

regulations. The director serves as the university liaison to United States Citizenship Immigration Services (USCIS), Department of Homeland Security, assisting with visa procurement and I-20 documentation, and advises F-1 visa students effectively, assuring institutional adherence to those immigration regulations and procedures-interpreting U.S. immigration policy to the university community. <http://www.pointloma.edu/InternationalStudents.htm>

## **Nicholson Commons**

Nicholson Commons provides activities and programs that enrich the university community academically, socially, physically, emotionally and spiritually. This social center for the university supports faculty, staff, and students in their desire to stimulate learning through positive, informal, collegial contact. The facility houses study areas, lounges, the ARC (Activity and Recreation Center), Common Knowledge Bookstore, Re-store Market, dining rooms, conference rooms, MOSAIC/Commuter Lounge, Commuter Student Services, Point Break Cafe, Bobby B's Coffee Co., Outdoor Leadership Programs and offices for ASB, Nicholson Commons staff, clubs, organizations, the offices of Spiritual Development and Student Development, and the Wellness Center. [www.pointloma.edu/nicholsoncommons](http://www.pointloma.edu/nicholsoncommons).

Meals are served regularly in the Dining Room of Nicholson Commons and conform to regulations of the City and County of San Diego and the State of California. Residential students are required to subscribe to a meal plan. Other students, faculty, staff, and guests may purchase meals on an individual basis. A snack bar, Point Break Cafe, is available for short orders.

## **Offices of Strengths and Vocation (OSV)**

The OSV is home to Strengths Coaching, Corporate and Business External Relations, Career Counseling Services, Student Employment, and Student Internships. Its mission is to assist each PLNU undergraduate student in developing a deep understanding of individual strengths and to holistically apply this knowledge to discover a student's purpose or calling in life.

The office has a wide variety of resources available to students including: career and strengths counseling, resume helps, student employment, internship opportunities, assessment testing, and events such as dinners, expos, and professional networking opportunities. For more information, visit the Office of Strengths and Vocation on the third floor of the Ryan Learning Center or online at [www.pointloma.edu/life/offices-strengths-vocation](http://www.pointloma.edu/life/offices-strengths-vocation).

## **Career Counseling Services**

The Career Counseling Services furnishes one-on-one counseling in assessments, career planning, job search techniques, resume development, and arrangements for off-campus job interviews. In addition, seminars are coordinated with professional speakers on current career trend subjects, employment readiness, and networking techniques. Along with Internship Networking Connecting (INC) events, Expos Days, Networking with Nurses, and summer camps fair, students are also able to attend a Graduate School Fair and a Seminary/Religious Studies Fair to help them choose an appropriate graduate experience. More information is available at Office of Strengths and Vocation.

## **Strengths**

The co-curricular Strengths Programs works collaboratively with the university community to incorporate a strengths approach to virtually all areas of campus life. Strengths-based programs offered by the Office of Strengths and Vocation include:

- StrengthsQuest Leaders are students who volunteer to undergo in-depth strengths training and take their strengths knowledge into the residence halls.
- Strengths Coaching by a Gallup certified coach, available at no charge to any student, faculty, or staff member.

- Strengths Training sessions offered annually for faculty and staff More information is available at Office of Strengths and Vocation.

## **Student Employment**

The mission of the Office of Student Employment is to help students discern and/or confirm their individual callings through their university employment experiences. Student Employment offers a variety of services including: online postings of both on- and off-campus jobs, support and advice for students who encounter challenges with their employment, and job search assistance. For more information, visit [www.pointloma.edu/work](http://www.pointloma.edu/work).

## **Outdoor Leadership Programs**

Outdoor Leadership Programs, located in the ARC on the first floor of Nicholson Commons, provides unique leadership opportunities for engaging students in the enjoyment of and connection to the outdoors. Our programs create shared experiences that help students establish relationships, give affordable access to equipment for personal adventures, and provide training to learn new leadership skills.

If students are looking for a weekend adventure, Great Escapes provides student-led outings of Southern California and beyond. When students have a personal adventure planned, they can take advantage of our expansive rental gear, which can be viewed and reserved online. Students who desire to gain wilderness living, survival, and group development skills can join our Guide Development Program. Check out Outdoor Leadership at [www.pointlomaoutdoors.com](http://www.pointlomaoutdoors.com).

## **Transfer Student Services**

Transfer Student Services serves as a central point of information for resources, services, and opportunities designed specifically for transfer students. The office provides students with assistance, support and connections to campus resources to facilitate a smooth transition to the PLNU community. Transfer Student Services is located within the Commuter Student Services office on the first floor of Nicholson Commons. For more information, students may visit [www.pointloma.edu/transferstudentservices](http://www.pointloma.edu/transferstudentservices).

## **Wellness Center**

The Student Success and Wellness - WELLNESS CENTER offers programs and services that enables students to participate and be educated in all aspects of wellness. The center's mission is to assist students in maintaining a high level of wellness so they are able to achieve their academic goals.

The Wellness Center is home to the student health center, counseling center, and wellness outreach. A physician, nurse practitioners, mental health counselors, and health educators work as a team to provide a comprehensive program. The staff has developed ties with a number of practitioners in the San Diego area including physicians, urgent care facilities, counselors, and dentists.

The center is open from 8:00 a.m. to 4:00 p.m., Monday through Friday, and closes from 12:30 to 1:30 for lunch. Health services and counseling appointments may be made by calling 619-849-2574 or on a walk-in basis. Counseling and most medical services are free to all registered undergraduate main campus students. There are charges for medications, injections, and other tests, labs, and physicals. Additional services include: immunizations, tuberculosis skin testing, travel medications, and special presentations. For more information, students may visit the Student Success and Wellness - WELLNESS CENTER website.

## **Emergency Services**

Professional staff is on-call for emergencies after hours and can be accessed through the Department of Public Safety. In case of any emergency, PLNU Public Safety are to be notified at extension 2525 (on campus) or 619-849-2525 (if utilizing a cell or off-campus phone).

PLNU Public Safety personnel will coordinate with emergency personnel and assist as needed. All Community Service Officers and Public Safety Staff Officers are trained in First-Aid, CPR and AED and can render first response until emergency services arrive. No one should attempt to move an injured person until Public Safety personnel arrive.

For additional information on emergency situations, students may visit the website at Public Safety Information.

## **Health Insurance**

Health insurance is an important part of health care. All undergraduate students regardless of course load or study abroad status are required to maintain a current health insurance policy and to provide proof of health insurance coverage.

## **Study Abroad Opportunities**

The Office of Global Studies creates and provides programs that directly serve the mission of the university, primarily at international sites. Specifically, these study abroad programs provide students with the opportunity to expand their understanding of global and societal issues through direct study in a culture distinct from their own. Participation in these programs amplifies and extends the "teaching, shaping, and sending" emphasis of the university mission by helping students encounter and understand changes confronting our world in the context of global community and world citizenship. Further information may be found in Study Abroad Programs.

## **Study Abroad Programs**

### **Off Campus Programs**

In support of its core values regarding developing a global perspective and promoting ethnic and cultural diversity, Point Loma Nazarene University actively encourages all students to spend a full semester studying outside the United States or with a designated domestic program. In an ever-expanding global community, the university recognizes the value of providing for students the opportunity to live and learn in another culture. Such an experience allows students to expand their understanding of other world cultures and reflect upon their own.

In addition to the programs listed below, which have been approved to offer PLNU course credit, the Study Abroad Office offers a wide range of programs through affiliated universities and program providers. Students applying to study abroad enroll by registering with the Study Abroad Office. All students must determine, in advance, with the approval of their faculty advisors and the Director of Study Abroad, how courses taken through these programs will be applied to their specific graduation requirements. Furthermore, students must consider the implications of studying abroad on university-funded scholarships. Program information and application materials may be obtained online at [www.pointloma.edu/studyabroad](http://www.pointloma.edu/studyabroad), via e-mail at [studyabroad@pointloma.edu](mailto:studyabroad@pointloma.edu), by telephone at 619-849-2972, or by visiting the office.

Students who are on academic or disciplinary probation, or those who are not cleared by the Dean of Students, are not eligible to participate in Study Abroad programs.

Programs designated with [CCCU] are sponsored by the Council for Christian Colleges and Universities.

## Study Abroad

- OCP 000 - Off-Campus Program (12-17)
- OCP 210 - Latin American Studies Program (6)
- OCP 220 - Middle East Studies Program (6)
- OCP 230 - Russian Studies Program (6)
- OCP 245 - China Studies Program (6)
- OCP 290 - Institute for Family Studies (1-8)
- OCP 299 - Special Off-Campus Studies (1-16)
- OCP 300 - Au Sable Environmental Field Studies Program (4-8)
- OCP 305 - American Studies Program (1-16)
- OCP 310 - Latin American Studies Program (10)
- OCP 315 - Los Angeles Film Studies Center (1-16)
- OCP 320 - Middle East Studies Program (10)
- OCP 330 - Russian Studies Program (10)
- OCP 335 - Oxford Honors Program (12-16)
- OCP 340 - Uganda Studies Program (1-16)
- OCP 345 - China Studies Program (10)
- OCP 350 - Washington Semester Program (1-16)
- OCP 355 - Washington Journalism Center (1-16)
- OCP 360 - Sacramento Semester Program (1-12)
- OCP 370 - United Nations Semester (1-16)
- OCP 380 - World Capitals Program (1-16)
- OCP 385 - PLNU and INSTEP Cambridge Summer Study Abroad Program (6)
- OCP 390 - Institute for Family Studies (1-12)
- OCP 399 - Special Off-Campus Studies (1-16)
- OCP 400 - Au Sable Environmental Field Studies Program (4-8)

## Office of Records

The Office of Records is a place where students, faculty, staff, and others can expect prompt, courteous, and helpful service. Some of the services we provide involve student registration, sending of Point Loma Nazarene University transcripts, assisting students with their graduation applications (grad checks), evaluation of transfer work, commencement and diplomas.

## Personnel

### Officers and Administrative Staff

### Office of the President

Bob Brower  
**President**

Jeffrey Carr, Sr.  
**Chief Diversity Officer**

John Calhoun  
**Director, Center for Pastoral Leadership**

Ron Benefiel  
**Lead Consultant for Mission Resources & Pastoral Relations**

## **Academic Affairs**

Kerry Fulcher  
**Provost and Chief Academic Officer**

## **Vice Provosts**

Holly Irwin  
**Vice Provost for Academic Administration**

Karen Lee  
**Vice Provost for Assessment and Institutional Effectiveness**

## **College Deans**

James Daichendt  
**Dean of the Colleges**

David Phillips  
*Vice Provost for Graduate and Professional Services*  
*Dean, College of Extended Learning*

## **External Relations**

Joe Watkins  
**Executive Vice President**

Sharon Ayala  
**Director, Marketing and Creative Services**

Christina Gardner  
*Executive Director, University Advancement Operations*

Taylor Hertel  
*Manager, Liberty Station Conference Center*

Kathy Meza  
*Senior Executive Director of University Advancement*

Jill Monroe  
**Director, Office of Public Affairs**

Scott Shoemaker  
**Associate Vice President for Enrollment**

Kendall Lucas  
**Interim Director, Alumni Relations**

## **Finance and Administrative Services**

George Latter, Jr.  
**Vice President for Finance and Administrative Services**

Cindy Chappell  
**Associate Vice President for Finance**

Janet Caprario  
**Associate Vice President for Budget and Accounting**

Jeffrey Herman  
**Associate Vice President for Human Resources**

Corey Fling  
**Chief Information Officer**

Bruce Kunkel  
**Director, Campus Facilities and Sustainability**

## **Spiritual Development**

Mary Paul  
**Vice President for Spiritual Development**

Brian Becker  
**Director, International Ministries**

Dana Hojsack  
**Director, Community Ministries**

Esteban Trujillo  
**Associate Director, International Ministries**

TBD  
**University Chaplain**

George Williamson  
**Director, Worship Arts**

Melanie Wolf  
**Associate Director, Discipleship Ministries**

## **Student Development**

Caye Smith  
**Vice President for Student Development**

Jeffrey Carr, Sr.  
**Associate Vice President for Student Development**

Kimberly Bogan  
**Associate Dean for Student Success & Wellness**

Jeff Bolster  
**Dean of Students, Director of Residential Life**

Mark Galbraith  
**Director, Public Safety**

Ethan Hamilton  
**Director, Athletics**

## **Centers and Institutes**

Robert Gailey, Executive Director  
**Center for International Development**

James Gates, Director  
**Center for Justice and Reconciliation**

Jo Clemmons, Director  
**Center for Teaching and Learning**

John Calhoun, Director  
**Center for Pastoral Leadership**

Susan Rogers, Academic Director  
**Early Childhood Learning Center**

Mary Margaret Rowe, Director  
**Health Promotion Center (School of Nursing)**

Linda Beail, Director  
**Margaret Stevenson Center for Women's Studies**

Sam Powell, Interim Director  
**Wesleyan Center for 21st Century Studies**

## **Office of Academic Affairs**

### **Provost**

Kerry D. Fulcher, Ph.D.  
Office: Mieras Hall, Room 201  
Telephone: (619) 849-2651  
Fax: (619) 849-2579  
E-mail: [kerryfulcher@pointloma.edu](mailto:kerryfulcher@pointloma.edu)  
Administrative Assistant: Mary Lynn Hewett

## **Academic Administration**

Vice Provost: Holly Irwin, Ph.D.  
Office: Mieras Hall, Room 203  
Telephone: (619) 849-2706  
E-mail: hollyirwin@pointloma.edu  
Administrative Assistant: Shelley Fruchey

## **Assessment and Institutional Effectiveness**

Vice Provost: Karen Lee, Ph.D.  
Office: Taylor Hall, 205  
Telephone: (619) 849-2535  
Fax: (619) 849-7018  
E-mail: karenlee@pointloma.edu  
Administrative Assistant: Amy Garcia

## **Board of Trustees**

The Board of Trustees serves as the governing board of the University. Numbering 23 persons, the Board is composed of lay and clergy representatives from the twelve districts of the sponsoring denomination's Southwest Educational Region. The president of the University is a member ex-officio. The Board meets semiannually, in the fall of the year and again in the spring. Members of the Board who have received a degree from the university are noted by year.

## **Officers of the Corporation**

Rev. Steven R. Scott (1977)

**Chair**

*Stockton, California*

Craig Furusho (1973)

*Vice Chair*

*Honolulu, Hawaii*

Ms. Jan Stone (1968)

**Secretary**

*Whittier, California*

## **Members of the Board**

Ken Baruth

*Olathe, Kansas*

Mr. W. Thomas Battin (1959)

*Ruidoso, New Mexico*

Rev. Ira F. Brown

*Prescott, Arizona*

Dr. Bob Brower

*San Diego, California*

Mr. Larry Fry (1980)

*Roswell, New Mexico*

Mr. Jose Hernandez  
*Chandler, Arizona*

Mrs. Mary Leland  
*Keller, Texas*

Ms. Nancy Martine-Alonzo  
*Albuquerque, New Mexico*

Leanne Mudge (1990)  
*San Clemente, California*

Rev. John Nells  
*Winslow, Arizona*

Daryl Nicholson (1968)  
*Porterville, California*

Rev. Doug Pierce  
*Chandler, Arizona*

Dr. Rick Power  
*Honolulu, Hawaii*

Dr. Donald Schengel (1978)  
*Visalia, California*

Rev. Dr. Orlando R. Serrano  
*Santa Fe Springs, California*

Mr. Gary Smee (1976)  
*Porterville, California*

Rev. Rob Songer (1976)  
*Bakersfield, California*

Dr. Daniel Spaite (1979)  
*Chandler, Arizona*

Mr. Mendell Thompson (1976)  
*Glendora, California*

Ms. Carol VanBuskirk (1979)  
*Saratoga, California*

## **Foundation Board**

The Foundation Board is elected by the Board of Trustees. The purpose of the Foundation is to provide major gift fundraising for Point Loma Nazarene University (PLNU) through excellence in strategic development, major donor engagement, and oversight of foundation assets. Members of the Foundation Board who have received a degree from the university are noted by year.

## **Officers of the Board**

Mr. Gary Smee (1972)  
*President*  
*Porterville, California*

Mr. Scott McGuckin (1996)  
**Vice President**  
*Granite Bay, California*

Mr. Gilbert Wai (2013)  
*Secretary*  
*Hillsborough, California*

Mr. George R. Latter, Jr. (1977)  
**Treasurer**  
*San Diego, California*

## **Members of the Board**

Mr. W. Thomas Battin (1959)  
*Ruidoso, New Mexico*

Dr. Bob Brower (1998)  
*San Diego, California*

Dr. Carolyn Downey (1961)  
*La Jolla, California*

Mr. Michael Gebhart (2004)  
*Rancho Murrieta, California*

Dr. Daryl C. Nicholson (1968)  
*Porterville, California*

Rev. Steve Scott (1977)  
*Stockton, California*

Mr. Nate Spoelman (2005)  
*Rancho Santa Fe, California*

Mr. Mendell L. Thompson (1976)  
*Glendora, California*

Dr. Joseph E. Watkins, III (1978)  
*San Diego, California*

## **Point Loma Nazarene University Alumni Association**

### **Mission Statement**

The Point Loma Nazarene University Alumni Association exists to provide opportunities for alumni to stay involved with the university, support the university, connect with other alumni and interact with our students. The association facilitates ongoing dialogue between the alumni and the university.

## **Officers of the Board**

### **President**

Joy Straub (1982)  
*Oceanside, California*

### **Vice President**

Greg Rizio (1988)  
*Orange, California*

### **Past President**

Leanne Mudge (1990)  
*San Clemente, California*

### **Secretary**

Shelly Conner (1984)  
*Temecula, California*

### **Treasurer**

Ken Agee (1971)  
*Palm Springs, California*

## **Area Directors**

### **Anaheim - Co-Directors:**

Julie Orr (1993)  
*Fullerton, California*

Matt Karahadian (2010)  
*Irvine, California*

### **Arizona**

Kevin Alexander (1983)  
*Chandler, Arizona*

### **Central California**

Renee Harris (1979)  
*Fresno, California*

### **Hawaii**

Will Campbell (2009)  
*Kaneohe, Hawaii*

### **Los Angeles - Co-Directors:**

Nihaara Sairsingh (2012)  
*Los Angeles, California*

Kaylyn Larson (2015)  
*Los Angeles, California*

#### **New Mexico**

Luke Arnold (1996)  
*Edgewood, New Mexico*

#### **Nor Cal**

Jeff Monroe (1992)  
*Campbell, California*

#### **Sacramento**

Matt Robertson (1992)  
*Rocklin, California*

#### **So Cal - Co-Directors:**

Peter Gilon (2011)  
*Lakeside, California*

Joy Toro (1991)  
*San Marcos, California*

### **Directors at-Large**

Sheila Holly (1959)  
*San Diego, California*

Dr. Tom Andrews (1962)  
*Spring Valley, California*

Shannon Fox (2007)  
*Fairfax, Virginia*

### **Class Representative Co-Leaders**

Anna Viettry (2017)  
*San Diego, California*

Alexis Drakodaidis (2017)  
*Foothill Ranch, California*

#### **ASB President**

Daria Szepkouski (2018)  
*Pala, California*

### **Auxiliary Representatives**

**Business Alumni**

Kevin Christensen (2009)  
*San Diego, California*

**Education Associates**

Leanne Richardson (2007)  
*San Diego, California*

**Friends of Forensics**

Dr. Eddie Potter (1960)  
*Glendora, California*

**Amigos and Alumni**

Marshela Salgado Solorio (2001)  
*San Diego, California*

**MOSAIC Alumni**

Kelby Sarti (2010)  
*San Diego, California*

**MUSICAlumni - Co-Chairs:**

Bernardo Campos (1993)  
*San Diego, California*

Dana Ayer (1963)  
*La Mesa, California*

**Nursing Alumni**

Debbie Holly (1978)  
*San Diego, California*

**Phi Delta Lambda - Co-Chairs:**

Doug Zuill (2012)  
*Poway, California*

Nick Erze (2014)  
*San Diego, California*

**Political Science Alumni and Friends**

Jill Monroe (2007)  
*San Diego, California*

**Psych Associates**

Kelsy Richardson (2011)  
*San Diego, California*

**Research Associates**

Rick Bravo (1979)  
*San Luis Obispo, California*

### **Rugby Associates**

Karl Sator (2005)  
*Orange, California*

### **Women's Auxiliary and Friends**

Jeanne Kall (1964)  
*Rowland Heights, California*

## **Faculty**

### **President**

**Bob Brower**, Ph.D., *1998-present*

### **President Emeritus**

**Jim Bond**, D.Min., L.H.D., *1997*

### **Professors Emeriti**

*(Including date of election to emeritus status)*

**Laura Amstead**, Ed.D., *2015*  
*Professor Emerita of Education*

**Kenneth Aring**, Ph.D., *2006*  
*Professor Emeritus of Physics*

**Paul Bassett**, M.F.A., J.D., *2015*  
*Professor Emeritus of Communication and Theatre*

**Philip Bowles**, Ph.D., *2016*  
*Professor Emeritus of Literature, Journalism and Modern Languages*

**Frank Carver, Ph.D.**, *1996*  
*Professor Emeritus of Religion*

**Val Christensen**, Ph.D., *1994*  
*Professor Emeritus of Chemistry*

**Mary Conklin**, Ph.D., *2016*  
*Professor Emerita of Sociology*

**Diana Cordileone**, Ph.D., *2017*  
*Professor Emerita of History*

**James Crakes**, Ph.D., *1994*  
*Professor Emeritus of Physical Education*

**Daniel Croy**, Ed.D., 2017  
*Professor Emeritus of Management*

**Dorothy Crummy**, Ph.D., 2006  
*Professor Emerita of Nursing*

**William DeSaegher**, Ph.D., 2004  
*Professor Emeritus of Literature*

**Beryl Dillman**, Ed.D., 1990  
*Professor Emeritus of Education*

**Darrel Falk**, Ph.D., 2014  
*Professor Emeritus of Biology*

**Clifford Fisher**, D.Min., 1992  
*Professor Emeritus of Religion*

**Ben Foster**, M.A., 2013  
*Associate Professor Emeritus of Kinesiology*

**Sandra Foster**, M.S., 2008  
*Associate Professor Emerita of Family and Consumer Sciences*

**Ruth Grendell**, D.N.Sc., 2000  
*Professor Emerita of Nursing*

**Nancy Hardison**, Ph.D., 1998  
*Professor Emerita of Business*

**Victor Heasley**, Ph.D., 2012  
*Professor Emeritus of Chemistry*

**Billy Hobbs**, Ph.D., 1996  
*Professor Emeritus of Mathematics*

**Keith Holly**, Ed.D., 2001  
*Professor Emeritus of Psychology*

**Sheila Holly**, M.A., 2001  
*Assistant Professor Emerita of Education*

**James Jackson Sr.**, Ph.D., 1990  
*Professor Emeritus of Speech*

**David Kerk**, Ph.D., 2010  
*Professor Emeritus of Biology*

**Carroll Land**, Ph.D., 2009  
*Professor Emeritus of Kinesiology*

**Gerald Lashley**, Ed.D., 2000  
*Professor Emeritus of Mathematics and Computer Science*

**Dwayne Little**, Ph.D., 2010  
*Professor Emeritus of History*

**Patsy Livingston, M.A., 2005**  
*Associate Professor Emerita of Kinesiology*

**Dean Marsh, D.A., 2004**  
*Professor Emeritus of Computer Science and Business*

**Ken Martin, Ph.D., 2016**  
*Professor Emeritus of Chemistry*

**Kathryn McConnell, Ph.D., 2015**  
*Professor Emerita of Spanish*

**Michael McConnell, Ph.D., 2014**  
*Professor Emeritus of Biology and Chemistry*

**James McEliece, Ph.D., 2010**  
*Professor Emeritus of Economics*

**Jeanie Milliken, Ph.D., 2003**  
*Professor Emerita of Education*

**Robert Morwood, Ed.D., 2013**  
*Professor Emeritus of Education*

**Nancy K. Murray, Ph.D., 2016**  
*Professor Emerita of Family and Consumer Sciences*

**James Newburg, M.S.L.S., 2006**  
*Librarian Emeritus*

**Deana Noble, M.S.N., 2013**  
*Associate Professor Emerita of Nursing*

**Keith Pagan, D.Mus.Ed., 1998**  
*Professor Emeritus of Music*

**John Pearson, C.P.A., M.A., 2003**  
*Associate Professor Emeritus of Business*

**Herbert Prince, M.Div., D.D., 2005**  
*Associate Professor Emeritus of Philosophy and Religion*

**Dee Punttenney, Ph.D., 2012**  
*Professor Emeritus of Physics*

**Reuben Rodeheaver, D.Mus.Ed., 2001**  
*Professor Emeritus of Music*

**Ann Ruppert, M.L.S., 2004**  
*Librarian Emerita*

**Karen Sangren, Ph.D., 2017**  
*Professor Emerita of Art*

**Esther Saxon, D.M.A., 1996**  
*Professor Emerita of Music*

**Arthur Seamans**, Ph.D., 2000  
*Professor Emeritus of Literature*

**Gene Shea**, C.P.A., M.A., 2004  
*Associate Professor Emeritus of Accounting*

**Dale Shellhamer**, Ph.D., 2012  
*Professor Emeritus of Chemistry*

**Norman Shoemaker**, D. Min., 2014  
*Professor Emeritus of Christian Ministry*

**Sheldon Sickler**, Ph.D., 2009  
*Professor Emeritus of Mathematics and Computer Science*

**Margaret Stevenson**, Ed.D., 1999  
*Professor Emerita of Nursing*

**David Strawn**, Ph.D., 2008  
*Professor Emeritus of Mathematics*

**Keith Walker**, Ph.D. 2007  
*Professor Emeritus of Physics*

**Maxine Walker**, Ph.D., 2008  
*Professor Emerita of Literature*

**Reuben Welch**, B.D., D.D., 1990  
*Associate Professor Emeritus of Religion*

**David Whitelaw**, D.Th., 2000  
*Professor Emeritus of Religion*

**Kay Wilder**, Ed.D., 2013  
*Professor Emerita of Family and Consumer Sciences*

**Hadley Wood**, Ph.D., 2013  
*Professor Emerita of French and Literature*

**Galen Yorba-Gray**, Ph.D., 2017  
*Professor Emeritus of Spanish*

## **Full-Time Faculty**

With the exception of the President, the names of the faculty are arranged alphabetically. The year of the first appointment appears after each name. The appointments and academic rank indicated are for the current academic year.

**Bob Brower**, Ph.D. (1998)

**President**

**Professor of Communication**

B.A., Trevecca Nazarene College;

M.A., University of Cincinnati;

Ph.D., University of Kansas.

**Micki Abercrombie-Donahue**, Ed.D. (2011)

**Assistant Professor of Education**

B.A., The Master's College;  
M.A., Ed.D., Montana State University.

**Mary Adams, Ph.D. (2015)**

**Associate Professor of Nursing**

B.S.N., Loyola University;  
M.S.N., Lewis University;  
Ph.D., Loyola University, Chicago.

**David Adey, M.F.A. (2003)**

**Professor of Art and Design**

B.A., Point Loma Nazarene University;  
M.F.A., Cranbrook Academy of Art.

**Senyo Adjibolosoo, Ph.D. (2000)**

**Professor of Economics**

B.A., University of Ghana;  
M.A., York University;  
Ph.D., Simon Fraser University;  
Ed.S., Point Loma Nazarene University.

**Angelica Almonte, Ph.D. (2012)**

**Associate Professor of Nursing**

B.S.N., University of Maryland;  
M.S.N., Ph.D., University of San Diego.

**Brent Alvar, Ph.D. (2017)**

**Professor of Kinesiology**

B.S., M.S., Ph.D., Arizona State University.

**Dianne Anderson, Ph.D. (2005)**

**Professor of Biology**

**Director, Biology Graduate Program**

B.S., Northwest Nazarene College;  
M.S., San Diego State University;  
Ph.D., University of California, San Diego and San Diego State University.

**Theodore Anderson, Ph.D. (1986)**

**Professor of Kinesiology**

A.B., Point Loma College;  
M.Ed., College of Idaho;  
Ph.D., Texas A & M University.

**Jerry Arvin, M.S. (1994)**

**Assistant Professor of Physical Education**

B.S., Greenville College;  
M.S., Butler University.

**Kimberly Athans, M.Ed. (2017)**

*Associate Professor of Teacher Education*

B.A., University of San Diego;  
M.A., University of Houston;  
M.Ed., University of San Diego.

**Linda Beail, Ph.D. (1994)**

**Professor of Political Science**

**Director, Margaret Stevenson Center for Women's Studies**

B.A., Wheaton College;  
Ph.D., University of Iowa.

**Laurance Beauvais, Ph.D. (2013)**

**Associate Professor of Chemistry**

B.S., University of Houston;  
Ph.D., University of California, Berkeley.

**Ronald Benefiel, Ph.D. (1996-2000, 2011)**

**Lead Consultant for Mission Resources and Pastoral Relations**

**Professor of Sociology and Theology**

B.A., Pasadena/Point Loma College;  
M.A., Point Loma Nazarene College;  
Ph.D., University of Southern California.

**Scott Bennett, Ph.D. (2007)**

**Associate Professor of Spanish**

B.A., M.A., San Diego State University;  
Ph.D., University of California, Santa Barbara.

**Heather Bertrand, MAEL (2017)**

*Assistant Professor of Special Education*

B.S., California State University, Bakersfield;  
M.A., MAEL Point Loma Nazarene University.

**Jeffrey Birdsell, Ph.D. (2016)**

*Assistant Professor of Communication*

B.A., Point Loma Nazarene University;  
M.A., San Diego State University;  
Ph.D., The University of Texas at Austin.

**Carol Blessing, Ph.D. (1993)**

**Professor of Literature**

*Chair, Department of Literature, Journalism, and Modern Languages*

B.A., Messiah College;  
M.A., California State University, Los Angeles;  
Ph.D., University of California, Riverside.

**Daniel Bothe, M.B.A. (2009)**

*Dean, Fermanian School of Business*

**Associate Professor of Finance**

B.S., San Diego State University;  
M.B.A., University of Southern California.

**Ryan Botts, Ph.D. (2010)**

**Associate Professor of Mathematics**

B.S., M.S., Cal Poly Sate University, San Luis Obispo;  
Ph.D., Ohio University, Athens.

**Max Butterfield, Ph.D. (2013)**

**Associate Professor of Psychology**

B.A., Calvin College;  
M.S., Eastern Michigan University;  
M.S., Ph.D., Texas Christian University.

**Conni Campbell**, Ed.D. (2007)

**Professor of Education**

**Associate Dean for Undergraduate Programs, Teacher Performance Assessment, and M.A.T.**

B.A., M.Ed., University of San Diego;

Ed.D., University of La Verne.

**J. David Carlson**, M.F.A. (2017)

**Professor of Art**

**Chair, Department of Art and Design**

B.A., Azusa Pacific University;

M.A., California State University;

M.F.A., Vermont College of Fine Art.

**Lorinda Carter**, Ph.D. (2002)

**Professor of Mathematics and Computer Science**

B.A., Point Loma Nazarene University;

M.S., California State University, Northridge;

Ph.D., University of California, San Diego.

**Benjamin Cater**, Ph.D. (2017)

**Assistant Professor**

**Associate Dean of General Education**

B.A., Point Loma Nazarene University;

M.A., The University of Montana;

Ph.D., University of Utah.

**Michelle Chen**, Ph.D. (2010)

**Professor of Physics**

B.S., B.A., M.A., University of Chicago;

Ph.D., University of Pennsylvania.

**Walter Cho**, Ph.D. (2012)

**Associate Professor of Biology**

B.A., Harvard University;

Ph.D., Massachusetts Institute of Technology and Woods Hole Oceanographic Institution.

**Sara Choung**, Ph.D. (2004)

**Professor of Chemistry**

**Co-Chair, Department of Chemistry**

B.S., Massachusetts Institute of Technology;

Ph.D., University of California, Berkeley.

**Mary Jo Clemmons**, Ed.D. (2011)

**Professor of Faculty Development**

B.M., University of Louisville;

M.A., Queens College;

Ed.D., Columbia University.

**William Clemmons**, Ph.D. (1996)

**Professor of Music**

**Co-Chair, Department of Music**

B.M., University of Louisville;

M.A., Queens College;

Ph.D., City University of New York.

**Benjamin Coleman, Ph.D. (2017)**  
*Director of Clinical Training*  
B.A., Seattle Pacific University;  
M.A., MACL, Ph.D., Fuller Theological Seminary.

**Lael Corbin, M.F.A. (2005)**  
*Visiting Assistant Professor of Art*  
B.A., Point Loma Nazarene University;  
M.F.A., San Diego State University.

**Nicole Cosby, Ph.D. (2011)**  
**Associate Professor of Kinesiology**  
B.A., Point Loma Nazarene University;  
M.A., San Jose State University;  
Ph.D., University of Virginia.

**Steven Cosentino, M.B.A. (2004)**  
**Associate Professor of Accounting**  
B.A., Point Loma College;  
M.B.A., San Diego State University.

**Catherine Crockett, Ph.D. (2008)**  
**Associate Professor of Mathematics**  
B.S., M.S., California State Polytechnic University;  
Ph.D., University of California, Riverside.

**Paula Cronovich, Ph.D. (2012)**  
**Associate Professor of Spanish**  
B.A., University of Southern California;  
M.A., Ph.D., University of California, Los Angeles.

**Gregory Crow, Ph.D. (1992)**  
**Professor of Mathematics**  
B.A., MidAmerica Nazarene College;  
M.S., Ph.D., University of Notre Dame.

**David Cummings, Ph.D. (2004)**  
**Professor of Biology**  
B.A., Point Loma Nazarene University;  
M.S., Ph.D., University of Idaho.

**James Daichendt, Ed.D. (2008)**  
**Dean of the Colleges**  
B.A., Azusa Pacific University;  
M.F.A., Boston University;  
Ed.M., Harvard University;  
Ed.D., Columbia University.

**John Dally, Jr., M.M. (2011)**  
**Associate Professor of Music**  
B.A., Point Loma Nazarene University;  
M.M., Sam Houston State University.

**Ann Davis, M.Ed. (2004)**  
**Assistant Professor of Kinesiology**

B.A., Washington State University;  
M.Ed., National University.

**Ronald DeLap, Ph.D. (2017)**

*Professor of Physics and Engineering*

B.S., Michigan Technological University;

M.A.T., National University;

Ph.D. The University of Michigan.

**Michael Dorrell, Ph.D. (2009)**

**Professor of Biology**

B.A., Simpson College;

Ph.D., The Scripps Research Institute.

**Robert Elson, Ph.D. (2003)**

**Associate Professor of Biology**

B.S., Ph.D., University of Cambridge, England.

**Deborah Erickson, Ed.D. (2013)**

**Dean, School of Education**

B.A.E, M.A., Pacific Lutheran University;

M.A., California State University, San Bernardino;

Ed.D., University of the Pacific.

**Grace Fantaroni, Ed.D. (2016)**

*Associate Professor of Special Education*

B.S., University of Delaware;

M.A., National University;

Ed.D., Alliant International University.

**Rebecca Flietstra, Ph.D. (1997)**

**Professor of Biology**

B.A., Calvin College;

Ph.D., University of Kansas Medical Center.

**Phyllis Fox, M.L.S. (1997)**

**Assistant Professor of Library Science**

B.A., Point Loma Nazarene College;

M.L.S., University of California, Los Angeles.

**Douglas Fruehling, M.L.S. (1992)**

**Associate Professor/Instructional Services Librarian**

B.S., Olivet Nazarene University;

M.L.S., Kent State University.

**Kerry Fulcher, Ph.D. (1993)**

**Provost and Chief Academic Officer**

**Professor of Biology**

A.B., Northwest Nazarene College;

Ph.D., University of Idaho.

**Christopher Gabler, M.S. (2015)**

*Visiting Assistant Professor of Physics*

B.S., Cal Poly Pomona;

M.S., UC Santa Barbara;

M.S., San Diego State University.

**Robert Gailey, Ph.D. (2005)**  
**Professor of Business**  
**Director, Center for International Development**  
B.A., Eastern Nazarene College;  
M.Div., Nazarene Theological Seminary;  
Ph.D., University of San Diego.

**Susan Ganz, Ph.D. (1997)**  
**Professor of Kinesiology**  
B.A., Azusa Pacific University;  
M.S., Austin Peay State University;  
Ph.D., University of New Mexico.

**James Gates, Ph.D., (2001)**  
**Professor of Sociology**  
**Director, Center for Justice and Reconciliation**  
B.A., Eastern Nazarene College;  
M.Div., Nazarene Theological Seminary;  
Ph.D., University of Florida.

**Shirlee Gibbs, Ed.D. (2005)**  
**Professor of Education**  
B.S., M.Ed., University of Toledo;  
Ed.Spec., Point Loma College;  
Ed.D., Northern Arizona University.

**Stephen Goforth, M.A. (2012)**  
**Assistant Professor of Journalism**  
B.A., University of South Alabama (2);  
M.A., The American University.

**Robert Graeff, Ed.D. (2016)**  
*Visiting Associate Professor of Educational Leadership*  
B.A., United States International University;  
M.A., Point Loma Nazarene University;  
Ed.D., Northern Arizona University.

**Timothy Hall, Ed.D. (2008)**  
**Associate Professor of Kinesiology**  
B.A., M.A., Point Loma Nazarene University;  
Ed.D., Alliant International University.

**Jill Hamilton-Bunch, Ph.D. (2002)**  
**Associate Professor of Education**  
**Associate Dean of Teacher Education and Bakersfield Branch Campus**  
B.A., Point Loma Nazarene University;  
M.A., Fresno Pacific University;  
Ph.D., University of California, Santa Barbara.

**Carl Hammond, M.B.A. (2003)**  
**Associate Professor of Accounting**  
B.S., University of Denver;  
M.B.A., San Diego State University.

**Eugene Harris, M.A. (1981)**  
**Assistant Professor of Art**

A.B., Fresno Pacific College;  
M.A., San Diego State University.

**Rebecca Havens, Ph.D. (1990)**

**Professor of Economics**

B.A., Point Loma College;  
M.A., Ph.D., University of California, San Diego.

**Linda Hensley, D.N.P. (2010)**

**Associate Professor of Nursing**

B.S.N., San Jose State University;  
M.S.N., Point Loma Nazarene University;  
D.N.P., Brandman University.

**Richard Hill, Ph.D. (2000)**

**Professor of Writing**

B.A., University of California, Santa Cruz;  
M.F.A., University of Iowa Writers' Workshop;  
Ph.D., University of Louisiana, Lafayette.

**Richard Hills, M.A. (1985)**

**Associate Professor of Kinesiology**

A.B., Point Loma College;  
M.A., San Diego State University.

**Kimberly Hogelucht, Ph.D. (2006)**

*Associate Dean, Undergraduate Business Education*

**Professor of Business**

B.A., Iowa State University;  
M.A., San Diego State University;  
Ph.D., University of San Diego.

**Alan Hueth, Ph.D. (2002)**

**Professor of Communication**

B.A., California State University, Chico;  
M.A., San Diego State University;  
Ph.D., University of Dayton.

**Holly Irwin, Ph.D. (1998)**

**Vice Provost for Academic Administration**

**Professor of Psychology**

B.A., M.A., Ph.D., University of Louisville.

**Daniel Jackson, D.W.S. (2002)**

**Professor of Music**

**Co-Chair, Department of Music**

B.A., M.A., California State University, Fresno;  
D.W.S., Institute for Worship Studies.

**Ariane Jansma, Ph.D. (2014)**

**Associate Professor of Chemistry**

B.A., B.S., Pepperdine University;  
M.S., San Diego State University;  
Ph.D., University of California, San Diego.

**Daniel Jenkins**, Ph.D. (2004)

**Professor of Psychology**

B.A., Pacific Christian College;  
Ph.D., Brigham Young University.

**Jesús Jiménez**, Ph.D. (1992)

**Professor of Mathematics**

B.S., M.S., National Autonomous University of Mexico;  
Ph.D., University of Utah.

**Brittany Johnson**, M.S. (2014)

*Assistant Professor of Family and Consumer Sciences*

B.S., M.S., Loma Linda University.

**John Craig Johnson**, D.M.A. (2005)

**Associate Professor of Music**

B.S. Southern Nazarene University;  
M.M., University of Oklahoma;  
D.M.A., University of Southern California.

**James Johnson**, Ed.D. (1991)

**Professor of Education**

B.A., M.A., Pasadena College;  
Ed.D., University of Southern California.

**Michelle Kelford**, M.S. (2012)

*Assistant Professor of Nursing*

B.S., M.S., Virginia Commonwealth University.

**Brad Kelle**, Ph.D. (2004)

**Professor of Biblical Literature**

**Director, M.A. in Religion**

B.A., Trevecca Nazarene University;  
M.T.S., Emory University Candler School of Theology;  
Ph.D., Emory University.

**Rick Kennedy**, Ph.D. (1995)

**Professor of History**

B.A., M.A., Ph.D., University of California, Santa Barbara.

**Jaeyoon Kim**, Ph.D. (2005)

**Professor of History**

B.A., Chonnam National University, Korea;  
M.A., San Diego State University;  
Ph.D., University of Oregon.

**Jennifer King**, M.S. (2017)

**Associate Professional Practice Professor of Nursing**

B.S., University of California, Santa Barbara;  
M.S., Point Loma Nazarene University.

**Kristopher Koudelka**, Ph.D. (2014)

*Associate Professor of Biology*

B.A., University of Wisconsin - River Falls;  
Ph.D., The Scripps Research Institute.

**Jennifer Kritsch, M.A. (2012)**  
**Associate Professor of Education**  
B.A., Northwest Nazarene College;  
M.A., Point Loma Nazarene University.

**Leon Kugler, Ph.D. (1978)**  
**Professor of Kinesiology**  
**Director, Athletic Training Program**  
A.B., Point Loma College;  
M.A., California State University, Los Angeles;  
Ph.D., University of Toledo.

**Victor Labenske, D.M.A. (1987)**  
**Professor of Music**  
B.A., Point Loma Nazarene College;  
M.M., University of Missouri, Kansas City;  
D.M.A., University of Southern California.

**Rebecca Laird, D. Min. (2011)**  
**Professor of Christian Ministry and Practice**  
B.A., Point Loma College;  
M.A., Pacific School of Religion;  
D. Min., Drew University.

**Kristen Lambert, Ph.D. (2010)**  
**Professor of Nursing**  
B.A., Antioch University;  
M.S.N., Ph.D., University of San Diego.

**Tricia Lauer, Ph.D. (2016)**  
*Assistant Professor of Education*  
*Director, Assessment and Accreditation for School of Education*  
B.S., Iowa State University;  
M.S., Kansas State University;  
Ph.D., University of the Rockies.

**Karen Lee, Ph.D. (2016)**  
*Vice Provost for Accreditation and Institutional Effectiveness*  
B.A., M.F.A. Brown University;  
M.A., Ph.D., University of California, Berkeley.

**G. Michael Leffel, Ph.D. (1992)**  
**Professor of Psychology**  
B.A. Point Loma Nazarene College;  
M.A., California State University, Long Beach;  
Ph.D., University of Illinois, Champagne-Urbana.

**Michael Leih, Ph.D. (2015)**  
*Associate Professor of Computer Information Technology*  
B.A., Point Loma Nazarene University;  
M.S., California State University, Fullerton;  
Ph.D., Claremont Graduate University.

**Alain Lescart, Ph.D. (2005)**  
**Professor of French**  
M.A., University of Connecticut;

M.S., Eastern Nazarene College;  
M.A., Faculté Universitaire de Théologie Protestante de Bruxelles;  
Th.M., Académie de Versailles;  
Ph.D., University of Connecticut.

**Patricia Leslie, Ph.D. (1999)**  
**Professor of Sociology and Social Work**  
**Director, Social Work Program**  
B.A., M.A., University of Chicago;  
Ph.D., Loma Linda University.

**Jennifer Lineback, Ph.D. (2012)**  
**Associate Professor of Biology/Education**  
B.A., B.S., M.S., Miami University;  
Ph.D., University of California, San Diego and San Diego State University.

**Michael Lodahl, Ph.D. (1999)**  
**Professor of Theology and World Religions**  
B.A., Northwest Nazarene University;  
M.Div., Nazarene Theological Seminary;  
Ph.D., Emory University.

**Lindsey Lupo, Ph.D. (2007)**  
**Professor of Political Science**  
**Co-Chair, Department of History and Political Science**  
B.A., University of California, Santa Barbara;  
M.A., Ph.D., University of California, Irvine.

**Heidi Lynch, M.S. (2017)**  
**Assistant Professor of Kinesiology**  
B.S., Wheaton College;  
M.S., Arizona State University.

**Kara Lyons-Pardue, Ph.D. (2014)**  
**Associate Professor of New Testament**  
B.A., Northwestern Nazarene University;  
M. Div., Nazarene Theological Seminary;  
Ph.D., Princeton Theological Seminary.

**Mark Maddix, Ph.D. (2016)**  
*Dean, School of Theology and Christian Ministry*  
*Professor of Practical Theology*  
B.A., Asbury College;  
M.Div., Asbury Theological Seminary;  
M.A., Princeton Theological Seminary;  
Ph.D., Trinity Evangelical Divinity School.

**Jeanne Maiden, Ph.D. (2006)**  
**Professor of Nursing**  
**Director/Associate Dean, M.S.N.**  
B.S., National University;  
M.S., C.N.S., San Diego State University;  
Ph.D., University of San Diego.

**Katherine Maloney, Ph.D. (2012)**  
**Associate Professor of Chemistry**

B.S., Pacific Lutheran University;  
Ph.D., Cornell University.

**Mark Mann, Ph.D. (2008)**

**Associate Professor of Theology**

B.A., Eastern Nazarene College;  
M.Div., Boston University, School of Theology;  
Ph.D., Boston University Graduate School.

**Katie Manning, Ph.D. (2012)**

**Associate Professor of Writing**

B.A., Point Loma Nazarene University;  
M.A., University of Missouri, Kansas City;  
Ph.D., University of Louisiana, Lafayette.

**Frank Marshall, D.B.A. (2017)**

**Associate Professor of Management**

B.S., Bentley University;  
B.S., California State University, Long Beach;  
M.S., University of San Diego;  
D.B.A., George Fox University.

**Karl Martin, Ph.D. (1998)**

**Professor of Literature**

B.A., Point Loma Nazarene College;  
M.A., Ph.D., University of Minnesota.

**Enedina Martinez, Ed.D. (1994)**

**Professor of Education**

B.A., National University;  
M.S., United States International University;  
Ed.S., Point Loma Nazarene College;  
Ed.D., Northern Arizona University.

**Patricia Maruca, Ed.D. (2016)**

*Associate Professor of Education*

B.A., San Diego State University;  
M.A., Point Loma Nazarene University;  
Ed.D., Northern Arizona University.

**April Maskiewicz, Ph.D. (2007)**

**Professor of Biology**

B.S., M.A., University of California, San Diego;  
Ph.D., University of California, San Diego and San Diego State University.

**Courtney Mayer, M.F.A. (2013)**

**Assistant Professor of Graphic Design**

B.F.A., M.F.A., Washington State University.

**Kelli McCoy, Ph.D. (2010)**

**Associate Professor of History**

B.A., Point Loma Nazarene University;  
M.A., Ph.D., University of California, San Diego.

**David Michael McKinney, Ph.D., J.D. (1970)**

**Professor of German and Literature**

A.B., California State College, Fullerton;  
M.A., Ph.D., University of Southern California;  
J.D., University of San Diego.

**Jacqueline Mitchell**, M.A. (1996)

**Associate Professor of Spanish**

B.A., Point Loma Nazarene College;  
M.A., University of California, Los Angeles.

**Kevin Modesto**, Ph.D. (2002)

**Professor of Social Work**

**Co-Chair, Department of Sociology, Social Work, and Family Sciences**

B.A., Eastern Nazarene College;  
M.A., Eastern Baptist Theological Seminary;  
M.S.W., Ph.D., University of North Carolina, Chapel Hill.

**Benjamin Mood**, Ph.D. (2016)

*Assistant Professor of Computer Science*

B.S., Point Loma Nazarene University;  
M.S., University of Oregon;  
Ph.D., University of Florida.

**Michael Mooring**, Ph.D. (1997)

**Professor of Biology**

B.A., University of Colorado, Boulder;  
M.S., Ph.D., University of California, Davis.

**José Muñoz, Jr.**, Ph.D. (2007)

**Associate Professor of Business**

B.S., M.B.A., Florida State University;  
D.B.A., Ph.D., Anderson University.

**Dean Nelson**, Ph.D. (1984)

**Professor of Journalism and Writing**

B.A., MidAmerica Nazarene College;  
M.A., University of Missouri;  
Ph.D., Ohio University.

**Denise Nelson**, M.S. (2004)

**Associate Professor/Instructional Services Librarian**

B.A., Point Loma Nazarene University;  
M.S., College of Information Science and Technology, Drexel University;  
Ph.D., Higher Education, Azusa Pacific University

**Melissa Newman**, Ph.D., (2013)

*Associate Professor of Communication and Theatre*

B.A., Colorado State University;  
M.A., University of Colorado;  
Ph.D., Regent University.

**Aaron Nunez**, Ph.D., (2017)

**Associate Dean, College of Extended Learning**

B.S., Southwestern College;  
M.S., Ph.D., University of Phoenix.

**Kendra Oakes Mueller, Ph.D. (2007)**

**Professor of Psychology**

B.S., Point Loma Nazarene University;

M.A., Ph.D., Fuller Theological Seminary, Graduate School of Psychology.

**Ross Oakes Mueller, Ph.D. (2007)**

**Professor of Psychology**

**Chair, Department of Psychology**

B.A., Brown University;

M.A., Ph.D., Fuller Theological Seminary, Graduate School of Psychology.

**Dawne Page, Ph.D. (2002)**

**Professor of Biology**

**Chair, Department of Biology**

B.S., Penn State University;

Ph.D., University of California, San Francisco.

**Charlene Pate, M.A. (1989)**

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